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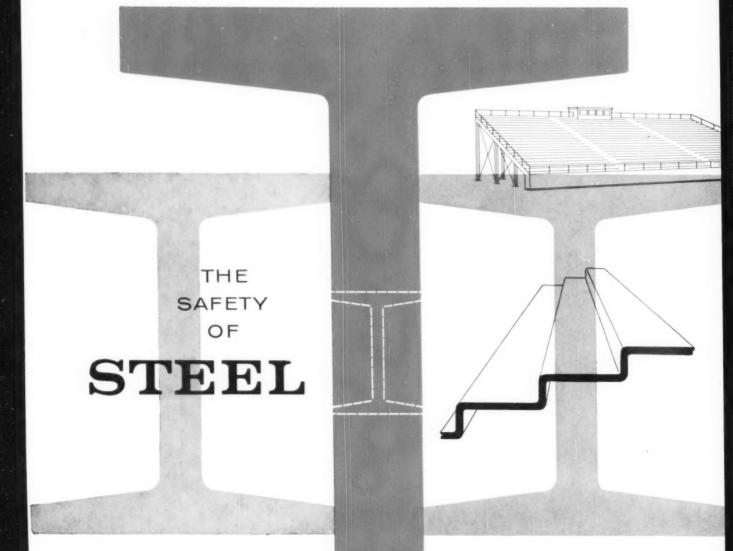
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OUR COVER . . .

A national man-power management program is being strongly advocated in many circles as the most effective solution to our country's appalling disparity between labor supply and demand in many fields. A review (pg. 26) of what caused the problem with details about the manpower program concludes with a statement about the school's five-part role in the program,

A review of your JOURNAL for May (pg. 4) -

WILLIAM C. BRUCE, Editor

Published on the 25th of the month preceding the date of issue by THE BRUCE PUBLISHING COMPANY, 400 North Broadway, Milwaukee 1, Wisconsin. CENTRAL OFFICE: 20 North Wacker Drive, Chicago 6, Illinois, EASTERN OFFICE: 233 Broadway, New York 7, New York.

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What will the teacher supply and demand picture be for the 1959-60 school year?

Your JOURNAL for May features Dr. Maul's preview of the most reliable indicator of the 1959 opening-of-school situation, the NEA Research Division's "Twelfth Annual National Supply and Demand Report." This first available review indicates: more graduating teachers than last year, but a greater enrollment will also up the need. On the bright side: a growing ratio of graduating teachers trained for mathematics and science instruction. The most unfavorable aspect is the continuing drop of grade school teachers to meet the increasing demand.

The 1959 Maul report (pg. 23) highlights the September situation on the national level as a guide toward what you can expect in relation to your district's needs!

Other articles of note in this issue which we know will be of interest to you:

1. New concepts of educational processes indicate changing ideas about instructional techniques, shifting thoughts on the school plant, and altered views on the role of the school executive. What this new role will be is analyzed (pg. 19) in an important article on the educational leader of the future.

2. Educational television is no longer envisioned as a panacea of all educational woes. In this light, a researcher provides some sobering questions (pg. 25) which should be answered by school officials in all districts where ETV is being considered before any action is taken.

3. The perennial summer renovation job is such a basic step in school plant upkeep that we asked a maintenance expert to spell out (pg. 32) the what-to-do and how-to-do-it

Interested in educational television? A free copy of "Cincinnati's Adventure into ETV," the report on this district's pioneering efforts with the medium which appeared in the February through April, 1959, issues of your JOURNAL, is yours for the asking. For your convenience use the addressed, postpaid Reader's Service Section (pg. 71) to order your copy!

for all administrators of the summer repair and refurbishing

These articles, as usual, are what we feel are the highlights but we hope you'll make it a point to review the entire issue and don't forget the regular departments!

for June ...

The school bus program in our schools continues to expand in size, cost, and complexity. To aid busy school officials meet this need, we've gathered some fine articles on ways toward a more efficient transportation program.

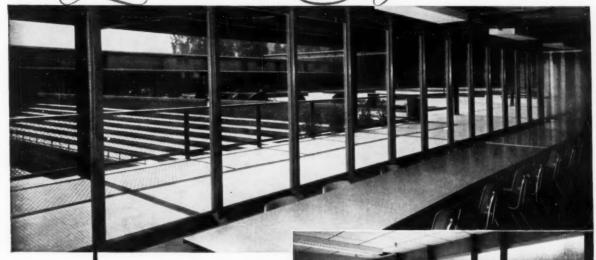
The Editor

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EDITORIAL MATERIAL. Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited and will be paid for upon publication. Contributions should be mailed to Milwaukee direct and should be accompanied by return postage if unsuitable. The contents of this issue are listed in the "Education Index." More Xaylight and Safety with MISCO



Hillsdale High School, San Mateo, California, District Superintendent, Thomas F. Reynolds Architect: John Lyon Reid and Partners Glass and Glazing: Cobbledick - Kibbe Glass Co.

20,000 square feet of MISCO WIRE GLASS installed in New California High School

Beautiful window walls of Misco perform double duty at the new Hillsdale High School, San Mateo, California... provide plenty of daylight to create an open, friendly, easy-to-work-in atmosphere while offering protection against breakage and serving as a fire retardant.

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- 3. Teaching efficiency increases

RECENT STUDIES concerning new school buildings bring significant facts to light. You can build a modern, fully air-conditioned school building for less money than it costs to build a conventional building, because it can be more compact. If the building is designed for air conditioning the savings can more than pay the cost of the air conditioning equipment.

Moreover, the *operation* of the air conditioning pays for itself—due to greatly reduced cleaning, painting and decorating bills.

Most important, there is an increase in faculty and student efficiency. This means better teaching, better learning. Studies show that because of body heat and the sun's rays it takes outside air of less than 60 degrees to cool a school building without air conditioning.

When outside air is above 60 degrees, classrooms are sure to be uncomfortable. Above are some U.S. Government figures, showing the percentage of school-year classroom hours,

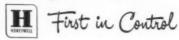
CITY	% classroom time, during the regular school year, that outdoor temperature is above 60 degrees			
LOS ANGELES				
DALLAS	.62%			
WASHINGTON, D. C.				
ST. LOUIS	43%			
CLEVELAND	34%			
CHICAGO	32%			
MINNEAPOLIS				

in various cities, when the temperature is above sixty degrees.

These are the times when air conditioning is *vital*, if adequate efficiency in teaching and learning is to be maintained. Of course, these figures do *not* include the important summertime. With an air conditioned school, summer study is more popular. The school can be used in the hottest weather, day and night. It can also be utilized for recreational activities that would be impossible without air conditioning.

The other benefits of air conditioning—in terms of increased comfort and cleanliness—are immeasurable. Today, more than ever before, it is important to examine the economies of air conditioning before you build. Consult your architect, consulting engineer or air conditioning contractor. Or write: Minneapolis-Honeywell, Department AJ-5-84, Minneapolis 8, Minnesota.

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Surveying the School Scene

N. Y. CORPORAL PUNISHMENT LAW

The New York Legislature voted recently to put "the hickory switch" - or its equiva-lent - back into the classroom. The Senate approved a controversial bill to give public school teachers the authority to use "reason-able force in moderate degree" in keeping discipline. The bill was designed primarily to give teachers in New York City schools the right to quell classroom uprisings by direct and immediate action, over-riding the board

of education's ruling forbidding teachers to spank, slap, or otherwise strike a pupil. Critics of the measure stated that the Legislature ought to leave it up to local boards to decide how far they want teachers to go in keeping classroom peace.

BOARD MEMBERS RESIGN

Three members of the Metropolitan School District board of education in Calumet town-ship, Lake County, Ind., resigned after a strike 130 teachers, members of the American

news notes of special

Federation of Teachers, crippled operations of seven district schools and kept 2500 students home. Hearing of the resignations of chairman Clarence J. Greenwalk and trustees Lester H. Alvey and Arthur N. Busse, the teachers returned to the classrooms pending mediation with the board members to be appointed. The teachers accused the board of refusal

to meet with union representatives to discuss grievances concerning contract procedures.

CAMERON NAMED OF SCHOOL HOUSING CHIEF

John L. Cameron, director of the division of school planning for the North Carolina



State Department of Public Instruction, named Chief of School Housing in the Office of Education by U.S. Commissioner of Education Lawrence G. Derthick Mr. Cameron succeeds Ray L. Hamon who retired last September.

In his new post Mr Cameron will work

closely with state and national organizations and associations interested in planning school plant programs. He will develop information on desirable practice in the construction and maintenance of school buildings and sites throughout the nation.

HOUSE CUTS NDEA FUNDS

The House Appropriations Committee in Washington has recommended that the request for supplemental funds for the year ending June, 1959, of \$75 million for the National Defense Education Act, be cut to \$50 million. The Committee also recommended that additional funds be made available for the college student loan program, but has eliminated funds for each of the other six programs for which appropriations were requested.

A total of 43 states have indicated that they

need during the fiscal year 1959 \$52 million in order to strengthen, through the purchase of equipment, their instructional program in science, mathematics, and language. Even if the supplemental request is granted, there would still be \$2 million less than the 43 states need.

A total of 6000 applications have been received from 169 institutions of higher education for graduate fellowships.

The states have certified that they are prepared to use \$11.573 million for strengthening their programs in guidance, counseling, and testing, \$5.4 million is now available.

FRISCO BOARD RETURNS TO STANDING COMMITTEES

The San Francisco, Calif., school board voted recently to adopt the old "standing committee" system, eliminated 15 years ago in the district. The board will subdivide into committees to discuss curriculum, buildings, public information, etc.

URBAN NEED FOR SMALLER DISTRICTS

Commissioner of Education James E. Allen, Jr., has proposed that schools in large metropolitan areas, including New York City, be broken up into smaller school systems in order that they may be brought closer to the

(Concluded on page 66)

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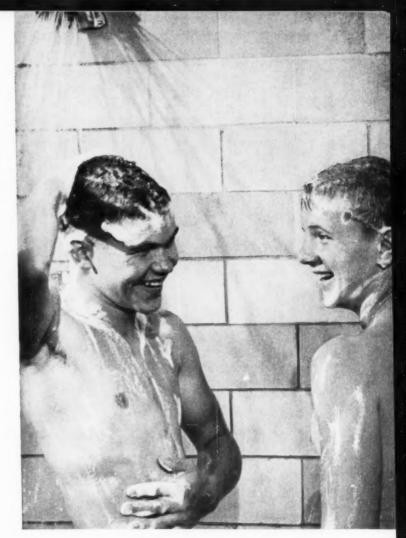


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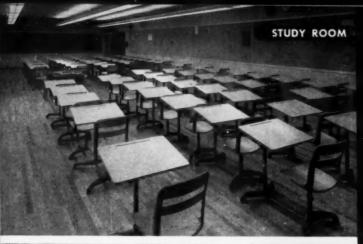
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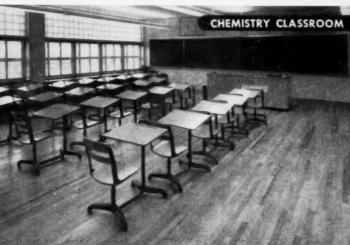


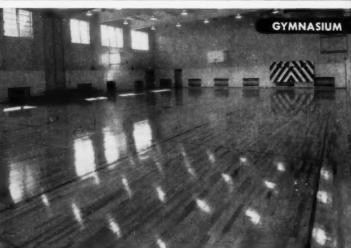
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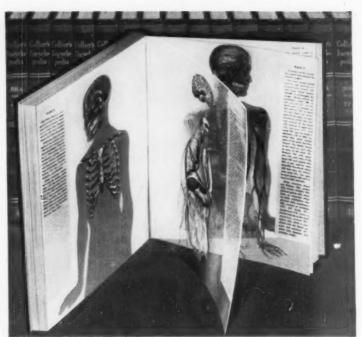
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PROS AND CONS

Fire Safety Survey

All the recommendations made by the various writers (pp. 32-40, March, 1959, JOURNAL) are good. However, it is a waste of the taxpayer's money to apply every rule to every building. For example, fire-resistant buildings of concrete or fire-proof steel with metal doors and trim, metal windows, metal and concrete stairs, metal desks, metal lockers, etc., should not be required to have the same enclosures, sprinklers, etc., as a wooden framed building with all wooden floors, stairs, windows, wardrobes, and wooden furniture. Yet many recommendations being considered for new laws take no account of this difference. If city councils or state legislatures enact blanket laws out of sheer panic fire safety will be gained at a great waste of the taxpayer's money.

Howard M. Parkhurst Architect, Rock Island, III.

Board-Superintendent Relations

I have read your article on "How the Board and Superintendent Can Work Together as a Team" (pp. 24-26, March, 1959, JOURNAL) and there are some items that are found in the two articles that I cannot agree with....

1. School boards should not be told things unless a proper explanation backed by facts can also be presented. A failure to proceed along this line will cause trouble. A school board member that is opposed to the project proposed may and often does, rouse special groups to appear before the board and protest favorable action on the recommendation. If the school board has to have such an agenda submitted to it before it meets, it apparently does not trust it's superintendent. If the school board wants more information, it can postpone action, and call for more facts before taking action. A superintendent should know enough not to submit projects which the school board does not want.

2. The superintendent must know his school board, and must be free to present his problems to the whole board with arguments and facts at a meeting of the board, so that members of the board shall understand the reasons and the outcome of such a proposal. School boards are not expected to go out investigating all kinds of projects or asking the pressure groups to organize in favor of or against such proposals.

3. Again school board members generally do not meddle with the curriculum of the school. They hire experts to do that. Of course, if the school board wants an agricultural department in the school, they can arrange that. But such subjects as English, Mathematics, Science, Physical Education and other subjects are prescribed by the State Department of Education and it is a job for experts and not laymen to figure this out.

Even the legislature often dips into prescribing certain courses of study, but they allow the department of education to prescribe the courses.

School board members individually have no power to act. In a group, their actions are prescribed by laws. They hire people to do the work, usually I hope, on the recommendation of the superintendent. They are a legislative body, and often a judicial body, but if they want anything done they must employ someone to do it

A. I. Jedlicka Superintendent, Proctor, Minn., Schools





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the AMERICAN SCHOOL BOARD JOURNAL

May, 1959

The Educational Leader of the Future



The "school master" type of educational leader will give way to one whose greatest asset is the capacity to stimulate maximum effort on the part of his staff . . . whose distinguishing characteristic is the insight to help in human nature's drive for educational growth —

LEON MONES

Assistant Superintendent in Charge of Personnel and Chief Examiner, Newark, N. J., Board of Education

Most people are more or less aware of our present need for preparing and recruiting enough adequately educated teachers. Only professional educators, as a rule, realize that even more critical is the problem of selecting and educating capable school executives. For various reasons the general public is only vaguely conscious of the crucial role of the educational executive as he administers or supervises our schools in operation. The average person senses quite accurately the function of the industrial manager or the business executive, but he possesses only a dim notion of the responsibility of the educational leader. Yet, while the teacher in his classroom does the fundamental job of instruction, it is his superiors - administrators and supervisors - who often determine the ultimate success or failure of his efforts.

At the present time, the role of the educational leader is undergoing close scrutiny and re-evaluation. During the past 25 years there prevailed a curious tendency to diminish the status and responsibility of the "higher-ups" in education. As a result of misinterpreting the

teachings of Dewey and his disciples and as a result of the genuine concern for democratic decision and group effort in our American system of education. there arose a question and even suspicion about the "authoritarianism" of school leaders. It became quite the fashion in teacher circles, in educational seminars, and in college lecture rooms to criticize the "domination" and "dictatorial" decisions of school executives and to maintain that policy and procedure in education should be determined only through democratic processes. In schools of education and in teachers' colleges the philosophy was taught that the chief responsibility of the educational leader was to structure and put into operation democratic processes of school life and activity. Many professors even maintained that it was undesirable to keep school executives in office permanently; that it would be wiser, for instance, to establish rotating systems which would permit principals, supervisors, and directors in school systems to serve a limited time and be succeeded by other teachers for a limited time.

During this time the responsibility of educational supervision and school administration came in for a great deal of discussion in the light of such ideas, so that even such titles as "supervisor" or "director" were redesignated "helping teacher" or "co-ordinator." This prevalent tendency was certainly not without benefit, for it did finally result in a far more desirable, cordial, and trustworthy relationship between teachers and their superiors. In the course of the past 25 years a great deal of the fear, distance, and caste-status that used to separate the classroom teacher from his superiors has tended to diminish and be replaced by a warmer and more co-operative type of relationship.

New Concept of Educational Leader

A resurgence of certainty concerning the need of highly trained educational leaders, however, is current today. From the very concern for democracy as the fundamental basis of education, from the conviction that group effort and cooperation are the worthiest patterns of educational organization, and from respect for the basic value and integrity of the individual teacher has arisen the new concept of the educational leader and his importance. And the most interesting aspect of this new concept is that the educational executive must be far different in selection, in personality, and in operation from his prototype in business or in industry.

Take the process of selection, for instance. A man in industry is selected for a managerial position largely on the basis of three factors: production of performance, knowledge of the business, and general traits of aggressiveness in seeking status and responsibility. Now, as far as education is concerned, it is highly questionable whether the most effective teacher or the one who knows most about his subject will necessarily make the most competent educational leader. And, as far as traits of aggressiveness are concerned, many maintain that too many of our educational leaders have attained executive positions through aggressive manipulations in politics, in civic life, and in general human association. Many believe that perhaps the most effective educational leaders are the very ones who are least aggressive in seeking status, position, and responsibility. In some of our important faculties of education the notion is today promulgated that the most successful educational leaders are those who are invited to accept responsibility rather than those who deliberately and aggressively seek it.

The Capacity to Stimulate

Furthermore, in business and industry, the promise and potential of a prospect for an executive position can generally be measured in terms of his production: his sales, profits, output. No such parallelisms exist in education, for the great asset of an educational leader is his capacity to stimulate and release the maximum of enthusiasm. thought, and earnest effort on the part of his staff. It is he who must be sensitive to the anxieties and tensions of his teachers, to regressive feelings of frustrations that teachers may develop, to the needs of support and encouragement they frequently have, to their needs of acceptance within power groups of their colleagues.

The distinguishing character of the educational leader is not a driving energy, a masterfulness, or a heroism in decision or action. It is, instead, the insight to help in human nature's exploitation toward educational growth, the wisdom to help chart the way to sound procedures and goals, and the willingness and capacity to subordinate his personal status and credit to group effort and achievement. Yet, with all this, the educational leader must be able to stand firm and determined should the

responsibility of decision inevitably be his to make. He must be secure and patient in the evolutionary process of education, realizing that neither perfection nor final solutions, but the recognition of continual problems is the essential reality of education. He must be able to respect the desire for independence and maturity of people and must be able to give rather than to demand loyalty and support.

New Qualifications

It is in the light of such conviction that educators are beginning to question the way in which we presently select and qualify our educational leaders. We have taken it for granted, for instance, that teachers should themselves aspire and prepare for educational leadership and that years of experience in teaching and certain patterns of study and State certification are proper means of qualification are requisites. Now many educators hold that likely teachers should be invited to assume responsibilities in which they may test and prove themselves through perhaps some kind of pattern of apprenticeship. As teachers through apprenticeship learn the responsibilities and functions of educational leadership, they should constantly be tested to assure such traits of personality and behavior as will be appropriate to proper educational leadership: their level of emotional maturity, their capacity for withstanding tensions, their ability to expend support and interest, their emotional comfort while working with others, their intellectual honesty, their interest in human welfare, etc. Scholarship and organizational ability, taken for granted, should not play the primary roles in selections that they formally did.

This brings up a highly practical consideration: the salaries of educational executives. In business and in industry it is taken for granted that the executive is worth remuneration on a very high level. In education, largely because the critical role of the executive was little appreciated, the executive has generally been paid only a little more than the classroom teacher. At present, extensive studies are being made to determine, if possible, a formula for a reasonable ratio of payment between the teacher and the various levels of educational leadership.

Gradually it is being realized that if our vast school system is to affect our social welfare as much as we hope, the role of the educational leader must be appreciated. School managers are not enough. We will need educational leaders with the vision, the courage, and the maturity of spirit to inspire our teachers rather than to manage them. Too many of our educational leaders are, at present, capable enough school managers as far as taking care of the routines of

school housekeeping are concerned. They attend capably enough to school equipment, to records and accounting, and to the arrangement of our assorted school facilities. But too many of them find security in precisely these mechanical duties. Too many of them conceive of their responsibilities in terms of shop foremen or plant managers.

What we will need in the future is the educational leader who can conceive of his responsibility in the broadest terms of personal, social, and human welfare. We will need the type of educational leader who understands education as the responsibility of organizing human beings so that they may in faith, satisfaction, and devotion join their efforts in helping young people share such experiences as will lead them to grow into good men and women, and into capable. dutiful, and happy members of the social order, dedicated to increasing human betterment. For this, good and efficient managers in the business sense of the word are not enough. Schools cannot be run on the basis of time studies, efficiency charts, or according to axioms of geometric efficiency. Perfect order and scrupulous efficiency are not the criteria of education. For education must assume that learning and maturity are the result of growth through ignorance, error, and dependence.

The process of education is not a charted blueprint that can be established, accepted, and continually repeated. Education must change, and develop, and expand just as life does. Educational horizons must be broadened continually.

The School of Tomorrow

It is, for instance, quite likely that the school of tomorrow may be quite different in organization and pattern from the school of today. Perhaps the traditional concept of the self-contained classroom with some three dozen pupils and a teacher in charge will have to go. Perhaps the human resources of our country will, in the future, not be able to furnish enough teachers to continue this traditional setup. Perhaps the facilities of television, new notions of mass communication, new ideas of teacher aids, new concepts of individual differences in the capacities of pupils, new needs of early specialization, new facilities for selfstudy at home, etc., may profoundly influence the pattern of our schools in the future just as they presently are influencing the architectural structure of our school plants.

At all events, the old school master type of educational leader, who arose from the old basic idea of a classroom in supervised session will probably need to go, to be succeeded by a new type of educational leader who will not hesitate to think along new lines.

Proper preparation, agendas and newsletters, quick handling of routine matters: here are ways to replace "bored" meetings with pleasant, rewarding ones —

How to Have Effective

How goes your board meeting? Tiresome? Excessively time-consuming? Tedious? Board meetings need not necessarily be so. They can, in fact, be interesting, pleasant, and rewarding in direct ratio to the amount and quality of the planning which has preceded each session.

Board meetings fall, typically, into one of two classifications, regular or special, each serving a particular purpose. Boards of education which function within a rather carefully formulated set of policies concerning the nature and character of the two kinds of meetings usually have fewer problems than would otherwise be the case.

Regular Meetings

1. Planning. School officers and members of boards of education are recognizing that the success of the board-meeting-phase of their job is closely related to planning. It is desirable to schedule a planning meeting directly upon the heels of the annual, board organizational meeting. The most important consideration here is to deter-

mine what the major objective for the year's work shall be. It is important, also, to define this major objective carefully, as opposed to a whole host of minor, related aims. The next step is to decide how to move.

A further, important aspect of the planning phase is the development of a board of education calender-for-the-year, including all regular and special meetings, school board institutes and workshops, school visitations and school plant inspections, local, state, and national conferences, and any and all other dates which a particular board may feel are significant.

2. Agenda for regular meetings. The procedure of mailing to board members a list of items which may be included in the suggested agenda is becoming common practice. Two other procedures may also be factors in a smoother, more effi-

Dr. Mosher is supervising principal of the Cato-Meridian Central School, Cato, N. Y., and Mr. Pittroff is president of the district's board of education.

Board Meetings

HOWARD H. MOSHER and IVAN L. PITTROFF



A committee works out the board's calendar-of-events.



The mathematics head discusses changes in the curriculum.



When the going gets tough, time out for a coffee break.



THE CATO-MERIDAN, N. Y., CENTRAL BOARD OF EDUCATION

From left to right: Howard H. Mosher, supervising principal (with back to camera); Charles Streeter, business manager; Sanford Sproul; Robert Weller, vice-president; Ivan L. Pittroff, president; Palmer Titus; John Whitman; and Edward Knecht, school attorney.

cient board meeting. A once-(or-twice-) a-month newsletter or notes or briefs, as well as more detailed interim or status reports, mailed from the office of the chief school officer, will often provide the members of the board of education with enough information so that they may act intelligently and quickly on particular items included in the agenda.

3. Items to be handled as routine. Many phases of the regular board meeting may be disposed of quickly and efficiently, as regular routine.

 a) Minutes of previous meetings may be mailed to members, obviating the necessity of having them read at each board meeting.

b) A committee for the board may meet with the business manager and the chief school officer, a few minutes before the regular meeting begins, to consider the bill schedule, the clerk's and treasurer's reports, special audits, etc. This committee, if there are no serious questions, will be able to recommend action to the entire board.

c) A considerable number of other items which must be included in the agenda of the regular monthly meeting may also be handled in routine fashion. Among these might be correspondence, reports required by statute or regulation, permission for personnel to attend conferences and other, similar items.

4. Policy, rules and regulations. Perhaps the single, most important contributing factor to the economy-of-time problem rests in the usefulness of the general policy of the board of education. A carefully prepared, uncomplicated policy—one that is strictly functional, easily and quickly modified, one that is understood and accepted by the community, one that has been recorded in a manual or a handbook with rules and

regulations in the appendix — is invaluable to the efficient board meeting.

5. Policy making versus administrative action. An appreciation and an acceptance of the clear position and definition of the place of the board and that of the chief school officer in the total school program are fundamental to a continually smooth operation.

6. Committees. Much has been written concerning the relative effectiveness of the "function-by-board-committee" process. The only safe generalization is that variance in the use of committees is extensive. The most satisfactory procedure would seem to be that which is predicted on the size and complexity of the school system, the number of persons on the board, and the degree to which committee work appears to contribute to the effectiveness of the board meeting. Certainly some use of committees is desirable, even inevitable.

7. Climate. The physical setup for the board meeting is of extreme importance. The meeting should be held in a board room, or, if unavailable, in a room which, at least for the moment, the board members feel is "theirs." It should be well lighted, well ventilated, and tastefully decorated.

Mechanical Details

Each board member should find a manilla folder, a paper pad, a freshly sharpened pencil, and an ashtray at his regular place. The folder, with the member's name on the tab, will contain the agenda, the schedule of invoices, copies of routine reports, reading material (homework) for the members, and any other material relating directly to the

business of the evening. A portable chalk board is often a necessary vehicle for a particular presentation or discussion. The table and chairs should be comfortably and attractively arranged, at the same time giving an air of business. A centerpiece, in keeping with the season of the year or the proximity of a holiday, will help set a proper tone. All of this preparation must be completed prior to the meetings so that board members will "get the feel" of the meeting as they enter the room.

Experience would indicate that board members, like other persons, have a span-of-attention saturation point. A cup of coffee, when this valley has been reached, will often help to clear up fuzzy thinking and will give a lift to the entire process.

The main purpose, of course, behind the move toward more efficient board meetings, by way of some of the techniques discussed here, is to provide more time for boards to consider their major task of improving the academic program. This is of particular importance in those school districts which schedule no meetings other than the regular monthly business meeting.

Special Meetings

Special meetings tend to deal with one of two kinds of material. The first is that which relates more or less directly to the theme of the regular meetings. Examples might be bid openings, building proposals, serious personnel problems, salary schedule, and policy revisions. Even here, it is possible to expedite matters and to save considerable time. Bids may be opened at a time other than at a regular or special meeting, providing proper authorization has been obtained and provided that there are board members present. This makes it possible for the business manager and the chief school officer to chart results and to prepare an analysis, in summary form, for presentation at the next regular or special meeting. Considerable time may be saved through such procedures.

The second type of special meeting, one highly recommended by the authors, is that which deals with reports or presentations by supervisory and/or teaching personnel and with a consideration of some particular phase of the academic program. Most boards of education are recognizing their responsibility for the quality of the academic program. It follows, then, that they will also want to know something about the program. They can learn in these special meetings. Experience would indicate that an enlightened board, program-wise, is one which is understanding of and sympathetic toward what the school really is trying to do for the pupils.

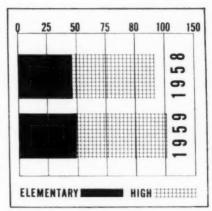
changing aspects of

Teacher Supply and Demand

RAY C. MAUL

Assistant Director, Research Division, NEA

- ▶ The over-all 1959—60 teacher supply and demand situation: the new supply of teaching graduates to come from the colleges will be up, again, from the year before.
- ▶ But demands for more teachers will also be up: larger enrollments, replacements for those leaving, etc.
- Most unfavorable aspect of the situation: the need for a greater supply of elementary school teachers is losing ground in its cal! for a greater share of the new supply.
- ▶ Potential mathematics, science, and foreign language teachers increasing at a faster-than-average rate is the most encouraging aspect of the situation.



The increasing teacher supply, 1958 to 1959.

No over-all change in the persistent teacher supply-demand problem is in the offing as the opening of the 1959-60 school year approaches. As has been the case ever since World War II, a few most favored districts will profit by the applications of highly qualified, successful teachers seeking promotion from the thousands of less favored districts. But the loss of these teachers will add to the dilemma confronting the great majority of employing officials. And as has been the case the past few years, the new supply of potential candidates to come from the colleges will be larger than the group a year earlier, but again the increase in the new supply will not equal the demands of a larger enrollment next September.

The nationwide needs of the educational enterprise vis-à-vis the probability of relief remain unchanged. But these two elements—one unfavorable and one potentially favorable—stand out in the Twelfth Annual National Report on Teacher Supply and Demand just released by the Research Division of the National Education Association:¹

1. *Unfavorable*. The over-riding need, a greater supply of qualified elementary school teachers, is steadily losing ground in its call for a greater share of the new supply coming from the colleges.

¹Through its program of expanded service the NEA Research Division furnishes a copy of this annual report to each college and university and each urban school district. The distribution is made through the office of the official in each state department of education who collaborates in the annual national study. Usually he is the Director of Teacher Education and Certification or the Director of Research. Because the contents of this report are of first importance to students planning their professional careers, single copies are available without cost to high school and college counselors on request to the NEA Research Division.

2. Favorable. Within the expanding group of new potential high school teachers those prepared to teach mathematics, science, and foreign language are increasing at a faster-than-average rate.

The public elementary school staff now totals 809,000 and the public high school staff totals 483,000. If the rate of withdrawal were the same at both levels. if the expanding enrollment were at the same rate, if the extent of unjustifiable overcrowding were the same, if the need for additional services were the same, and if the present level of preparation of teachers now in service were the same in both groups, then the future demands would be in the ratio of eight new elementary to five new high school teachers. Such a division of the new supply to come from the colleges has not prevailed in any past year, and right now the prospects are against any improvement in the present division, which is just about the reverse of the optimum. This is probably the most unfavorable aspect of the current situa-

The annual new supply of high school teachers fell 43 per cent in the 1950-55 period. During these years the annual new supply of qualified college graduates to teach science fell 60 per cent; the new supply to teach mathematics fell 53 per cent; the new supply to teach foreign language fell 39 per cent. Since 1955, with an annual increase in the total bachelor's degree class, the total number prepared to teach the various high school subjects has similarly increased. In 1956 and 1957 the new potential supply in the two fields of greatest shortage - mathematics and science - lagged percentagewise. But in 1958 the per cent of increase in these two fields exceeded the average, and in the 1959 class this percentage increase will be greater than last year. This is probably the most favorable aspect of the current situation, provided the local school districts can compete successfully with the other occupations for the services of this larger supply.

Elementary Field Loses Ground

The upsurge of the nationwide elementary school staff toward true professional status received its greatest impetus in the half-dozen years following the peak year in college graduations 1950. As the diminishing number of veterans pulled down the total of bachelor's degree graduates 34 per cent and the number of these graduates preparing for high school teaching fell 43 per cent, the number of graduates prepared for elementary school teaching climbed each year, with a five-year increase of 32 per cent. These were the years of increased acceptance of the single salary concept and a marked strengthening of standards, along with the increasing proportion of women in the college graduating classes.

But 1956 brought a turn. The total number of newly produced elementary school teachers continued to increase. but this group's proportion of the total began to fall. It lost ground in 1957, in 1958, and will continue to do so in

An unbiased view of future demands for elementary school teachers shows these five categories of need: (1) to replace teachers who leave classroom service; (2) to meet the requirements of larger enrollments; (3) to relieve excessive overcrowding and eliminate halfday sessions; (4) to offer needed services not now provided; and (5) to replace the lowest stratum of unprepared teachers.

In broad terms, meaningful efforts have been pointed toward four of these five needs. First, practically all replacement demands have been met, even if many times at the expense of qualifications: scarcely any classrooms have been abandoned. Second, a vigorous, even if not uniformly successful, effort has been made to add teachers in proportion to the increase in enrollments. Third, some modest efforts have been made to provide "special education" services for some of the handicapped even though the need continues to loom large. Fourth, the total elementary school staff has been substantially upgraded, with a consequent diminution of teachers almost entirely without preparation.

Unjustifiable Overcrowding Persists

But among these clearly identified needs of the elementary schools, one stands in greatest neglect: the unjustifiable overcrowding of classrooms (or the alternative, half-day sessions).

Why this neglect? One obvious reason, of course, is the lack of available classrooms. But another is the subtle argument of those who would deny the schools the level of financial support consonant with their dynamic role in our complex society. Some of these arguments, adroitly presented and presumably supported by carefully chosen quotations out of context, incomplete data, or bland misinterpretation, find a place in usually trustworthy publications.

In general, the opponents of relief from overcrowded classrooms take refuge behind these five contentions:

1. Conditions are actually better than they were 30, 40, and 50 years ago. Such fragmentary records as were assembled at the turn of the century are cited, presumably to show that improvement has occurred, but without an attempt to justify the herding of 40, 50, or even 60 small children into a classroom, as actually happened in those early days, or to correlate the needs of the society at a particular time with the demands of that society upon

its schools.

2. Conditions here are better than in certain foreign countries. Here there may be a measure of excuse for a critic of the American public schools if the critic were born, reared, and educated in a society which provided one type of education for an elite class of which he may have been a member, but restricted the "peasants and workers" to an indifferent kind of "education" which terminated for the great majority at about what we call the sixth grade.

3. National averages justify running roughshod over specific instances. One of the needs of today, to understand the complexities of our educational system at every level, is a more exact body of up-to-date facts. At the base, logically, must be an over-all view -- national statistics. But national statistics of necessity have one severe

limitation; they do not accurately portray the wide swings from a central measure. They do not describe specific cases involving real live children. It matters little. for example, to a class of 41 children in a second grade classroom if the nationwide pupil-teacher ratio has decreased one-half child since a certain earlier period. And the three biennial studies of the Research Division (most recent in 1957-58) show no material change in the tens of thousands of elementary school children in rooms of 33, 36, 38, and even more than 40. The concern of these children and their parents is with these local conditions, not variations in the national statistics

Again, the enemies of class-size reduction take refuge in national statistics which include all grades (1 through 12) and all subjects. Elementary school children of every grade are grouped indiscriminately with high school students who are at a vastly different level of maturity and readiness to assume a measure of individual responsibility for their progress. But the critics continue to bow at the shrine of national statistics.

4. Research does not prove that children cannot be taught in large classes certain facts to be repeated in quickly administered tests, and thus large classes are justified. The critics completely ignore the development of attitudes, the creation of ideals, the inculcation of ethical principles. and the building of a pattern of habits a task to be accomplished during the most impressionable years - for which the schools must accept a share of responsibility. They ignore the one incontestable finding of research to date: Short-term research does not and cannot prove at once what will be the ultimate influence of environmental conditions upon impressionable children. To cite just two examples:

a. In the study of the causes of juvenile delinquency, attention is focused upon present environment, but we have only begun to penetrate the foggy details of the early life of the juvenile - the extent to which the elementary school did or did not have a fair opportunity to accomplish its share of character building. The elementary school teacher burdened with the weight of excessive numbers certainly could not be expected to have been personally sensitive to each child's developing attitudes which may now be cropping out in his delinquency.

b. In the search for and encouragement of superior native talent the elementary school teacher (the public is now belatedly recognizing) plays a key role. Here again, short-term research is powerless to prove the extent to which sheer numbers may thwart the efforts of even the best teachers.

5. Both teachers and administrators resist large classes just to make it easy for themselves. This bold assertion is made in the face of the devoted service of tens of thousands of underpaid teachers who, because of their unflagging belief in the cause of education, have brought the American public school system to its present level of effectiveness. It would seem that any person who has himself profited by this dedicated service up through higher education levels could not maintain this artificial charge with good grace.

TABLE I.--GRADUATES OF 1958 AND 1959 PREPARED TO TEACH IN ELEMENTARY AND HIGH SCHOOLS

	Type of	1959			1958	1958 to 1959	
	preparation	Nen	Witnest	Total	total	Wet	Percent
	1	2	3	4	5	6	7
I	Elementary-school teaching:						
1	120 semester hours	6,147	41,343	47,490	45,318	+ 2,172	+ 4.79%
ŀ	High-school teaching:						
2	Agriculture	1,746	3	1,749	1.804	- 55	- 3.05
3	Art	906	1,618	2,524	2,233	+ 291	+ 13.03
4	Commerce	2.893	4,044	6,937	6,166	+ 771	+ 12.50
5	English	2,668	6,257	8,925	7,706	+ 1,219	+ 15.82
6	Foreign languages	661	1,344	2,005	1,627	+ 378	+ 23.23
7	Home economics	2	4.934	4.936	4,575	+ 361	+ 7.89
8	Industrial arts	4.074	26	6,100	3,791	+ 309	+ 8.15
9	Journalism	89	42	131	1009	+ 22	+ 20.18
10	Library science	88	389	427	385	+ 42	+ 10.91
11	Mathematics	3,119	1,604	4,723	3,445	+ 1,278	+ 37.10
12	Music	2,543	2,722	5,265	5,189		+ 1.46
13	Physical education (Men)	7.697		7.697	7.430	+ 267	+ 3.59
14	Physical education (Women)	3,032	3,032	2,762	+ 270	+ 9.78
15	Science	4,971	2,013	6,984	5,467	+ 1.517	+ 27.75
	15s General science	2,530	994	3,524	2,655		+ 32.73
	15b Biology	1,573	763	2,336	1.939		4 20.47
	15c Chemistry	563	217	780	619		+ 26.01
	15d Physics	305	39	344	254	+ 90	+ 35.43
16	Social sciences	9.333	4,364	13,697	11,672		+ 17.35
17	Speech	741	1,268	2,009	1,804	+ 205	+ 11.36
18	Other	1,610	1,469	3,079	2,928	+ 151	+ 5.16
	High-school total	43,091	35,129	78,220	69,093	* 9,127	* 13.21
	Grand total (not includ-						
	ing noncollege grad-						
	ustes shown on lines						
	2, 3, and 4)	49,238	76,472	125,710	114,411	+11,299	+ 9.88

me states all graduates prepared to teach the sciences are reported under

"General Science" as shown on line 15s. Many of these graduates have the equivalent of a full major in Biology or Chemistry or Physics and are thus well prepared to teach one of these subjects. This should be recognized in interpreting the figures shown on lines 15b, 15c, and 15d.

Total Needs Next September

The report of the NEA Research Division shows the following specific needs in September, 1959, together with an estimate of the contribution of the oncoming class of college graduates, and the number to be sought in the general population:

Needs which experience shows are most likely to be met: to replace those leaving, 2 94,500; to serve increasing enrollments, 3 33,000.

Needs which experience shows have not been met, and thus most likely to continue into the years ahead: to relieve overcrowding and eliminate half-day sessions, 4 30,000; to give instruction and services not now provided, 5 20,000. To replace the unprepared: 6 elementary, 30,000 and high school, 20,000.

The total teachers needed next September, 227,500.

The number of college graduates of 1959 likely to enter teaching (73 per cent of 125,700), 92,500.

The net estimated shortage, 135,000. The foregoing figures are necessarily estimates because the much-needed precise figures cannot be assembled in advance. Even as estimates, however, they leave no doubt about the number of qualified teachers needed in both the elementary and high schools of the nation, if every child is to be provided a fair educational opportunity.

Whatever measure of this shortage of 135,000 is actually met must come from sources in the general population—both qualified and unqualified persons who were not induced to enter teaching last September by the salaries then offered. This general reservoir includes women whose children have reached school age, men returning from military service, college graduates of earlier years who have been engaged in graduate study, persons engaged in other

resources had been sufficient.

The accompanying table shows separately by field of preparation the members of the class of 1959 who will meet standard certificate requirements. This new group of potential candidates is shown separately by sex, and the field totals are compared with those of 1958, along with percentage changes. Employers of teachers are thus provided with an overview of the national situation to be compared with local and into the compared w

occupations, and others of good quali-

fications. A great many local districts, unfortunately, will be in such near-bankrupt condition that they will not be able to attract these possible candidates. It is only necessary to look at conditions in many of these districts during the 1958–59 year to see that these prospective good teachers might have been brought into service during the current year if the district's financial

state conditions already known to them. For elementary school service the new class promises 47,490 potential candidates, an increase of 4.8 per cent over last year. Recent experience points to about 82 per cent of this number actually entering classroom service. This represents the greatest disparity between need and supply.

For high school service the new class promises 78,220 potentials, of whom recent experience shows that about two-thirds will be induced to enter candidacy for teaching positions. The gross increase in new supply is 13.2 per cent.

Employing officials will be interested, however, in the varying per cents of increase from field to field. After lagging percentagewise for several years the potential new supply in the fields of most critical shortage is showing encouraging improvement for the second year. In 1958, when the supply for the combined high school fields increased 10.5 per cent, science was up 18.8 per cent and mathematics was up 18.4 per cent. Now, with the combined high school fields promising to increase 13.2 per cent in 1959, mathematics points upward by 37.1 per cent and science promises 27.8 per cent more potential candidates.

These encouraging figures are testimony to the alertness of teachers and counselors back in 1955, when the per cent of newly qualified graduates in these two fields was cut most deeply. These professional workers did not need (nor did they await) the Russian penetration of outer space. They redoubled their efforts to do what some critics of the schools are now clamoring for: to identify and encourage students with natural aptitude for and possible interest in these fields. The challenge is now more clearly before the public - will the local districts be provided with the funds necessary to induce these potential candidates into the classroom?

The need to replace those leaving is estimated to be about the same as last year, despite the larger staff in 1958-59 than in 1957-58. As the qualifications of teachers in service rise there is an observable increase in career intentions. This should be reflected in the rate of withdrawals which, it is recognized, cannot be computed to the fraction of a per cent.

³This estimate recognizes that certain classrooms now in operation can absorb some of the increased enrollment. If the anticipated total increase were divided by the nationwide pupil-teacher ratio the indicated need would be 46,000.

^{*}Based on a 1957-58 Research Division study showing that in urban elementary schools alone there were in operation 31,230 classes of 31 or more pupils, including 6,882 classes of 36 or more, 1,311 classes of 41 or more, and 358 classes of 46 or more. The over-crowding of any class in any high school is not included because un-to-date figures are not available.

⁸This call is supported by the rising demand for more qualified counselors and specialists in the basic fields to be given greater emphasis.

[&]quot;Any call for the replacement of "unprepared teachers" must be based upon an arbitrary cutoff point. NEA and U. S. Office of Education estimates of teachers now holding "emergency" certificates are in the order of 95,000. The more conservative estimate of needed replacements offered here recognizes that many holders of limited certificates lack only certain technical requirements; the call should be to upgrade these teachers while they continue in service, rather than to replace them.

our MANIPOWEIR problem

H. H. LONDON

Professor of Industrial Education, University of Missouri, President of the American Vocational Association

America is confronted with a manpower problem that is growing more serious each year. The problem arises out of three major factors: (1) changes in the composition of our population, (2) technological changes going on in nearly every phase of our economy, and (3) the lack of any national man-power management program.

In this article an attempt is made to analyze these three factors briefly, to define the problem in its simplest form, and to discuss several approaches to its solution, with special reference to its implications for guidance and education in the schools.

The Composition of Our Population

Prior to 1920 immigration was the major factor in population growth. Since 1930 excess of births over deaths has accounted for the major portion of our increase in population. One result of this has been a decline in the number of highly skilled workers available from abroad.

In spite of the excess of births over deaths, between 1940-50 we had 10 per cent fewer teen-agers than we had in 1930. These were depression babies and their reduced number accounts, in the main, for the shortage of young workers available in today's labor market. But watch the future: according to the U.S. Department of Labor, 35 million babies were born during the 1940's and another 35 million have been born since. Thus, we may expect a 40 per cent increase in teen-agers during the present decade. These boys and girls are in our schools today: they will be entering the labor force in the 1960's.

Another significant change in the composition of our population is the actual and relative increase in the number of older persons, due largely to improvements in living standards and medical science. Many of these people are, of course, retired, and as such they want, chiefly, four things: to feel that they are still important; to maintain their independence: to do something

worthwhile with their time; and to have a job, at least part-time, through which to supplement their retirement income. Vocational guidance, adult education, and placement service is the answer to many of their needs.

Still another change affecting our man-power problem is the ratio of males to females: we now have more girls and women than we have boys and men. At the present time about one third of our labor force consists of women and approximately five million additional women will join the labor force by 1965. In 1900, women, on the average, worked 11 years: between the two world wars they worked 19 years: today's high school girls will work approximately 25 years. Obviously, this means that most girls should be educated for employment as well as for marriage.

The most significant change in the composition of our population has been the shift from rural to urban. Approximately 50 per cent of the youth born on the farms of the nation leave the farm



Our man-power problem — to reduce the disparity between present distribution of workers and the estimated future needs by occupations, on one hand, and the number of available workers, their occupational choices, and competencies, on the other — has been caused by three factors: (1) changes in the composition of our population (more teen-agers, more older persons, more women, etc.); (2) technological changes going on in nearly every phase of our economy (automation and its need for highly trained personnel); and (3) lack of any national man-power management program.

If this last factor were adopted as a solution to the

Implications for guidance and education

to find employment elsewhere. More women than men are involved in this shift. In towns and cities, these youth work chiefly in business, industry, and service occupations. In passing, it should be said that the major unsolved problem in vocational education is the establishment of area-vocational schools through which many farm boys and girls, no longer able to find employment on our farms, can be trained for employment in nonfarm occupations and thus enabled to compete more nearly on an equal basis with urban youth.

This does not necessarily mean that we need less emphasis on vocational agriculture in the public schools, for the U. S. Office of Education reports that the schools are graduating only about one half as many boys in this field as are needed annually for replacement purposes. Certainly those who remain on the farm must be better trained than ever in order to be successful farmers.

Fifty years ago a major portion of our Negroes lived on farms, but they now live in cities, particularly the larger cities. Generally lacking in education and technical training, this element of our population is at a distinct disadvantage in the labor market. A percentage of the Negroes living in the great cities of the North and East is on relief rolls during a good portion of the time. The only alternative to this is to train them for productive work and make a place for them in our labor force. This is an urgent problem, and should have the immediate attention of schools, employers, labor organizations, and government agencies.

Impact of Technological Changes

The first industrial revolution, beginning in America around 1820 and continuing with increasing momentum, substituted inanimate power and machinery for the muscles of man and beast. Thousands of new jobs arose and many old ones were subdivided. Productivity rose rapidly and the nation entered a new way of life and wealth making. The

second industrial revolution, beginning with World War II, called advanced mechanization or automation, is relieving man of the monotony of repetitive processes and substituting electronic, pneumatic, and hydraulic devices for human judgment and control. As a result, productivity is skyrocketing to unbelievable heights. Today, according to the Twentieth Century Fund, the United States, with a little more than 6 per cent of the world's population and less than 7 per cent of the world's land area, produces nearly one half of the world's manufactured goods and consumes well over one third of the world's goods and services.

This great upheaval is changing the nature of the labor force and increasing the need for highly trained personnel in nearly every line of endeavor. Already, there is practically no place left in our entire economy for the uneducated and unskilled worker. Just recently, we arrived at the point in this country where we have fewer people engaged in the producing occupations than in other types of occupations — a status attained in only a few countries of the world.

In 1950, according to the census reports, our labor force was distributed as follows: professional and technical, 8.4 per cent; proprietor, managerial and official, 8.6; clerical and sales, 18.8; industrial, 40; service, 10.1; and agriculture, 11.6.

This distribution, however, is shifting fast. The U. S. Department of Labor estimates that within the next ten years, barring depression or war, the following percentage of change will occur in the distribution of workers among these six groups: professional and technical + 37 per cent; proprietor, managerial, and official, + 22; clerical and sales, + 27; industrial, + 23; service, + 13; and agriculture — 15.

Workers Needed

Where will these workers come from? It is estimated that five million of them will be women, many will be older people, many will be Negroes, and, finally, there is the rising tide of youth. Right now there is an acute shortage of qualified workers in the following fields: scientific and research work, engineering and technical occupations, health services, executive and supervisory jobs, semiprofessional occupations, many branches of educational work, and in several of the highly skilled trades. A short time ago, the Department of Labor issued a list of over 80 critical jobs jobs essential to the economic well-being and common defense of the country, jobs in which there is a shortage of workers and few qualified people in sight to fill them. At the same time, there were between 41/2 and 51/2 million people unemployed.

The Man-Power Problem

causes and solution in relation to our schools—

problem, how would the schools be affected? A five-point school program would be involved: (1) to keep up with labor supply and demand, especially in critical occupations, through Department of Labor sources, etc.; (2) test and classify students methodically to ascertain their assets and liabilities as potential workers in different occupations; (3) counsel students and parents with a down-to-earth vocational service; (4) provide a suitable education for the academically talented, the average, and the dull; and (5) give more attention to the placement of graduates in college courses and in occupations for which they have been trained.



The schools must guide youth into occupations on the basis of need as well as interest and ability

What About a Man-Power Management Program?

Undoubtedly the most significant single factor in accounting for the current imbalance between man-power supply and demand in America is the complete lack of any man-power management program. Around the turn of the century, under the leadership of men like President Theodore Roosevelt, our country embarked upon a management program for its national resources, then being ruthlessly exploited on every hand. As a result, our dwindling supply of timber and wild life has been preserved and improved, our water and mineral resources managed much more efficiently, and the fertility of our soil greatly increased. But we have never undertaken a comparable program of managing our human resources.

In a democracy freedom of occupational choice, at least in theory, is looked upon as an almost sacred right of the individual. In practice we observe on every hand that ignorance, poverty, race, or place of residence often thwart freedom of occupational choice. Then, there is the white collar complex which often causes both youth and their parents to shun real opportunities in the labor market in search for an occupational Utopia. The institution of slavery and the tendency to prescribe vocational education for delinquents, the feebleminded, prisoners, and other wards of the state, have led to the attachment of a sociological stigma to certain manual occupations. Finally, the misinterpretation and misuse of psychological examinations have resulted in the attachment of psychological stigmas to many occupations, leading to further imbalances in our labor supply and demand.

Our secondary schools, in general, have not been greatly concerned with how well our supply of labor corresponds with the demands for labor in the different occupations. Our guidance programs have been largely ineffective in this respect, also. They have devoted their attention chiefly to a consideration of the interests and abilities of individuals and have paid little attention to the man-power situation, as such. Even our colleges have ignored the problem to a large extent. For example, while a total of only 800 new superintendents of schools are needed annually for replacement purposes according to the AASA, between 300 and 400 colleges and universities are training thousands annually, most of whom will have to work at some other job.

In their desire to lighten the work load of their children, many parents have ignored reality in regard to the occupational choices and training of their sons and daughters. Youth, by nature, tend to look with favor upon occupations that are characterized by glamor and adventure and they know very little, really, about the 25,000 different occupations available to them. At graduation time, a third of your youth have made no occupational choice whatever, and the choices that are made are often grossly out of line with reality.

Finally, mention should be made of the inequalities in pay tolerated, if not imposed, by society between the different occupations. Witness, for example, the salary paid a professional baseball player as compared with that of the master teacher, or that paid to a prize fighter as compared with the salary paid to the President of the United States for an entire year!

In summary, what is our man-power problem as it exists today? It is this: if we take the present distribution of workers and the estimated future need by occupational families, on the one hand, and the number of available workers, their occupational choices and competencies, on the other, we find that the two are miles apart.

What Can Be Done About It?

There are at least four alternatives: (1) ignore the problem, (2) draft workers for critical jobs, (3) subsidize certain occupations to attract workers, and (4) organize and maintain a man-power management program.

The first, of course, is no solution. The second is alien to our way of life, and will not be done except in case of war or some domestic calamity. Although the third approach has been tried in the past for certain industries and has been incorporated to some extent in the National Defense Education Act of 1958, this is really no solution to the problem. More adequate salaries would help, of course, in certain occupations, but these should be paid for the work done and not as grants out of the

public treasury. The fourth and remaining alternative, that of a man-power management program designed to keep labor supply and demand in balance and to make maximum use of human resources, is a sound approach, long overdue.

What would such a program involve on the part of the schools? In the first place, it would involve keeping up with labor supply and demand, especially in critical occupations, through Department of Labor sources of information, census reports, local occupational surveys, and the use of advisory committees in the different occupations. Such data and aid are now generally available but too largely ignored by educators.

A second thing that a man-power management program would involve on the part of the schools would be the methodical testing and classification of youth as they pass through the schools, to ascertain their assets and liabilities as potential workers in the different occupations. Most schools now have rather adequate testing programs, but they are oriented largely to subject matter, methodology, and grade placement, rather than toward occupations and life careers.

A third factor that would be included in such a program would be a downto-earth vocational counseling service reaching both students and their parents. The sixty million dollars authorized for guidance through the National Defense Education Act was included in order to correct the great imbalances in our man-power situation. If this is to result, counselors must of necessity rid themselves of the so called "nondirective" approach and take positive steps to guide youth, where possible, in conference with their parents, into occupations on the basis of the needs of the labor force as well as the interest and ability of the individual. Obviously, counseling which does not involve the parent and which accepts no responsibility for balancing labor supply and demand will not meet this need.

But, "What about innate interests and specialized abilities?" some will ask. Reply: people are not born with interests, except to eat and to avoid falling and loud noise. Interests are developed. With the possible exception of artistic and musical ability, people rarely have specialized aptitudes. On the contrary. any person can probably succeed equally well in any of a number of occupations on his ability level. Therefore, counselors, parents, and teachers should take positive steps to develop interests in those occupations where opportunity and need exist and which are appropriate to the individual's assets and liabilities.

In passing, it should be observed that (Concluded on page 64) A few sobering, realistic thoughts on the value of ETV which suggest questions to be answered before any board takes action to support ETV in its community — questions to determine the instructional and financial situation of the district, as well as the real worth of the medium —

ETV how sound an investment?

VICTOR W. DOHERTY

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With the "campaign" to sell educational television in full swing throughout the country, it appears advisable for school board members, and perhaps TV-supporting foundations as well, to take stock of ETV's real worth, especially for use in public schools, and to explore the foundations on which this new member of the educational structure is being erected.

It is the purpose of this article to give school board members cause to reflect carefully before taking action to support ETV, and to suggest that whether or not it is suitable for any given community depends upon the financial and instructional conditions that exist in the schools of that community as well as on the present and potential values of the medium itself.

Experiments in ETV have been and are continuing to be conducted in St. Louis, Chicago, Cincinnati, Hagerstown (Maryland), Pittsburgh, Miami, and several other cities, and evaluations have been almost exclusively undertaken by the school districts in which the experiments are being conducted. It is to the credit of the Ford Foundation, which has helped finance these experiments, that it has not attempted to direct or influence their evaluation.

To date it is probably correct to say that the results achieved have not reached the expectations once held by Ford Foundation officials. In fact, two major conclusions already appear to have been reached which are of great significance as concerns the future of inschool television in this country. The first of these is that TV will not replace the classroom teacher in any significant degree in the public schools. Apparently some of the early hope that television would result in a large financial saving to school districts throughout the country has been dimmed.

A second conclusion which appears tentatively to have been accepted is that TV can serve as a supplement to elementary and high school teaching but cannot stand alone as an instructional medium. Follow-up by a classroom teacher is now believed essential to the success of television teaching.

Five Values Claimed

Several values of ETV are claimed by its advocates. One of these is the bringing of a master teacher and other excellent or unusual experiences to large numbers of children who ordinarily would be deprived of instruction of good caliber.

A second value claimed is the bringing of instruction in subjects such as physics and advanced mathematics to rural schools where these subjects are not taught or are poorly taught due to the inadequacies of small staffs.

A third value is believed to be the help given teachers through the example

of the master teacher as seen on television.

A fourth value is the supplementing of regular instruction through presentation of unusual and stimulating programs.

Other lesser values could be enumerated, but these appear to be the most important ones and those on which appeals to use ETV are largely based.

ETV and the Lecture Method

How sound are the several values which it is contended that educational television holds? First, consider the value of the master teacher. In the past 30 years or more in American education, the chief aim of persons promoting a more enlightened approach to education has been to encourage individualized instruction. Research has proved beyond question that the ability of pupils to learn differs widely, and that achievement of children in any grade of the typical elementary school varies from four to eight years despite all efforts to accomplish uniformity of achievement. Furthermore, it is known that each child brings to school a different background and that by virtue of this background and the special inclinations of the child, each is interested in different things. Capitalization of these interests has been found to be an essential ingredient of successful teaching.

Because educators have learned this, there has been steady progress in the direction of teaching through projects. research, unit teaching, etc., which permits each child to pursue the same subject in different ways and at different levels of ability required, and other techniques designed to bring about more effective learning. One of the first victims of this movement was the lecture method, long recognized as inappropriate, wasteful, boring, and ineffective, not because of the excellence or lack of excellence of the teacher, but because the method itself does not recognize the essential differences in ability and interest of students being taught.

It is strange that any thinking educator could view television teaching as anything but the lecture or lecture-demonstration method revived and enlarged upon. It is unfortunate that the basic incompatibility between this approach to teaching and present understanding of the ways children learn is no more widely recognized as a chief weakness of inschool television.

It is true that where instruction is carried on by the lecture method there is little reason to believe that television with a master teacher could not accomplish the job as well or perhaps better than it is being accomplished, but it is a sad commentary on any public school system if the lecture method is the prevailing method of classroom instruction.

A second value which television teaching is supposed to have for the public schools is the stimulation it brings to the teaching staff who watch the television master teacher. In the writer's opinion, a resourceful and talented teacher will find TV instruction inferior to his own due to the limitations of the lecture method. An important point here is to distinguish between master teachers and master teaching. Master teaching is virtually an impossibility on TV, even for a master teacher.

Films and ETV

Telecasting courses to rural districts where resources of the staff are such that these courses cannot ordinarily be taught may prove to be a worthwhile contribution of ETV, although it should be pointed out that films can serve the same purpose and probably at a smaller cost to school districts. Films have the great added advantage that they may be used flexibly to meet the requirements of local scheduling and ways of teaching. The same advantages recommend films more highly as a means of supplementing the usual educational program.

It is enlightening to examine the programs for in-school viewing of stations presently operating. Although these programs appear impressive at first glance,

closer analysis reveals that even the programs of well-established stations are extremely meager and constitute a very small contribution to the educational program. Several typical schedules are presented on pp. 111–121 of *Television in Education*, a publication of the U. S. Office of Education. It is recommended that these schedules be closely examined by board members considering educational television.

Examining the Schedule

One of the most ambitious in-school programs is that telecast by Station WQED of Pittsburgh, Pa. Analysis of that station's schedule as reported in *Television in Education* reveals the following offerings on a typical day:

(1) Fifteen minute supplemental broadcasts daily in high school general science, intermediate-grade language arts, high school business practices, primary-grade science, and primary-grade speech improvement. (To make it possible for these broadcasts to reach each student once daily, and to be synchronized with the regular school schedules, it appears that each of the five programs was broadcast five times daily, five days a week.); (2) a reading class for fifth grade pupils; (3) an arithmetic class for fifth grade pupils; (4) a physics class for high school students; (5) a history and geography class for fifth grade pupils; and (6) a French class.

The major contributions of this program are three fifth grade subjects, a physics class, and a beginning French class. The budget of this community-operated station, excluding capital outlay, was \$510,488 in 1957–58 and \$629,385 in 1958–59. Although the major share of revenues did not come from the public schools of the Pittsburgh area, it must be assumed from an examination of the schedule of the station that its major costs are associated with producing school programs.

Seattle's KCTS on a typical day had the following schedule:

(1) 1:15-1:40, Traveling with Trippy (primary grades); and (2) 1:45-2:10, Resource for Harvest (intermediate grade talks on natural resources).

This is the extent for that day of inschool telecasting. Children's and adults' programs were scheduled for evening viewing.

The Ames, Iowa, educational TV station on a typical day showed one 30-minute current events broadcast for inschool viewing. All other programs were for adults' or children's after-school viewing.

Oklahoma City's KETA on a typical day offered 30-minute classes in algebra, physics, and trigonometry, with two elementary school or children's programs (The Laughing Clown, Tell-a-

Story) rounding out the program. It might be noted that physics and trigonometry are normally elective courses with relatively small enrollments.

The programs just described include some where real efforts have been made to develop good in-school use of television. The schedules speak for themselves. In even the most highly developed and co-ordinated in-school programs, only a small percentage of classes are being reached, and the appropriateness of television as the medium of instruction in these courses can seriously be challenged.

Limited In-School Use

Program emphasis in the majority of schedules shown in Television in Education reflect either greater success in. or better acceptance of, the adult and at-home children's telecasts than inschool telecasting. This suggests that if school boards accept a major share in the financing of community television they do so recognizing that in-school telecasting is not likely to develop as a panacea for local instructional problems, but that it is more likely to develop as a general educational medium for adults and as a way of bringing educational entertainment to children during evenings and week ends.

Whether or not a school board should undertake such support would, under these assumptions, depend upon: (1) the degree to which the board views its domain as public education in addition to public school education; and (2) whether or not public education may be met successfully through existing media, including commercial TV, if the board does decide to accept general public education as one of its responsibilities

In spite of all the objections to educational TV stated or implied thus far, it should be emphasized that uses may be found which will justify its support by a public school system.

Cincinnati is experimenting with an alternating television and follow-up system designed to reduce by half the number of teachers required in the teaching of biology. This experiment proved to be moderately successful and was perhaps less expensive than teaching biology with the usual complement of teachers. Actually, the cost would not be halved by any means, if reduced at all, due to the expense of the television programs. However, an extension of this principle might result in some reduction of costs. Whether arrangements of this kind could be made which would be extensive enough to result in an actual saving is far from having been proved in any school system. At present rates of pay, the annual cost of a television station would pay the salaries of from 30 to 90 teachers, depending on the extensiveness of the programs.

Closed-Circuit Uses

Some promising experiments are also being conducted with closed-circuit, school-operated television utilizing the assistance of commercial stations in the selection of equipment and planning of productions. These efforts are considerably more economical and lend themselves more flexibly to instructional uses than community operated stations. Such an experiment was successfully conducted by the Jefferson County, Kentucky, schools. There are some splendid examples of a well-planned experiment in the use of closed-circuit TV in public schools. Unfortunately the evaluation is highly colored by the enthusiastic reports of teachers who were elected to teach subjects on television. It is difficult to obtain an objective picture of the success of an experiment from reports of participants whose status has been affected and perhaps elevated by the experiment.

Values of Expenditures

In considering the possible use of TV in a school system there are other matters which deserve studied attention. Board members are sensitive to one thing which community pressure groups frequently are not — that any expenditure of school funds involves the weighing of values. The value of an expenditure for any purpose must be weighed against the value of other possible expenditures.

Advocates of ETV and other programs commonly generated through minority community pressures are constantly contending that these additional services will cost only one-half of one per cent of a school budget, or some amount which to the unschooled observer appears to be minute. What these persons do not understand is that the per cent of the school budget which may be devoted to instructional materials and other adjuncts to the instructional program is small indeed when compared with the virtually fixed costs for teacher salaries, maintenance and operation of the school plant, administration, and other necessary services. One-half of one per cent of a district's budget, therefore, becomes significant because this same amount, if devoted to the purchase of additional books, audio-visual materials, or the addition of a staff of school social workers or psychologists, can mean a great deal to the instructional program of any school system.

Thus it is necessary to weigh the costs of educational television, driver training, or any other new program against the values of similar expendi-

No board should be "called on to finance an ETV station without its staff having been asked to participate in a study of the costs, needs, and responsibilities such support would entail . . ."



- WTTW, Chicago

tures made for other services of proved value to the educational system.

School board members should also reflect on the possibilities that exist in other forms of experimentation. It is a rather remarkable fact that the monies spent by foundations for TV have not in any instance, to my knowledge, been matched by the ust of an equal amount of funds for some other program which might improve the quality of education in a school system in a way comparable to the improvement expected from ETV. In effect this is not experimentation at all, for the control situation is one where no money has been involved, and this is being compared with one where a considerable amount of money has been spent. Even under these most favorable of circumstances, ETV to date has proved itself neither an improvement over the usual program of instruction nor a promising source of economy for elementary and secondary education.

If the money invested in TV in a single year to bring television to a school system in two subjects (most experimental programs thus far have attempted to telecast one or two regular subjects) had been invested in the same subjects in laboratory equipment, purchase of resource books and audiovisual aids, and pay for resource people from the community, one cannot but wonder if more significant improvements might have been effected.

ETV: Burnt Bridges

Unfortunately, when ETV is set in motion it is no longer just an experiment, it is a heavy investment. It is very unlikely that a school district which has had a part in paying the initial cost of the equipment required and establishing the personnel structure necessary to maintain a station will ever abandon the venture. To do so would be to admit that imprudent judgment has been exercised, and few school administrators—or boards of education—care to

make such an admission. It is a simpler course to rationalize the expenditure; and since all values of education are relative, it is possible to build a defense for virtually any program. This is done by ignoring the comparative value of the expenditure and dwelling on whatever absolute values lend themselves to exploitation.

One final consideration, and a most important one, is the necessity of surveying the needs of a community for educational TV before undertaking a financial commitment.

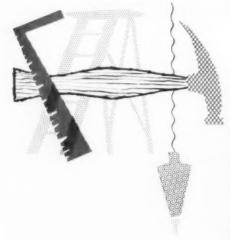
The U. S. Office of Education in Television in Education outlines a sound approach. In this publication it is pointed out that the needs for information, culture, and skill training which are not being met by existing educational agencies should be determined and the potential for meeting such needs through commercial TV stations should be thoroughly explored before considering a noncommercial station. This booklet also stresses the importance of a cooperative study of these needs by all agencies and groups that may use community TV services and especially those which may be involved in programming and financing.

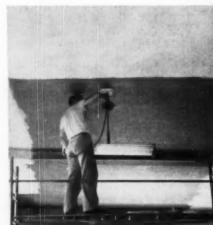
That a board of education should be called on to finance an ETV station without its staff having been asked to participate in a study of the costs, needs, and responsibilities that such support would entail is virtually an affrontery to the judgment of the board.

At present it appears to be a prudent course carefully to observe the effects of the experiments currently being conducted in ETV and to avoid being railroaded into the business until the medium has proved itself worth the investment required to initiate and maintain it. Research to date does not show it to be in this state of development. Perhaps within two or three years a different judgment may be formed concerning it.

The Summer Renovation Job

DAVE E. SMALLEY
Technical Editor, Better Building Maintenance







- Central States Maintenance, Inc.

cleaning the walls

Painted and ceramic or plastic tiled walls generally predominate in school buildings because they are the easiest to maintain. Washing is, of course, the accepted way for cleaning all these walls but in the case of painted walls there are several methods for doing this work. The sponge and the bucket of cleaning solution method has always been utilized for cleaning all hard surface walls, but there are "two schools of thought" as to how even this time-worn method should be accomplished, especially in the case of painted walls.

To many it would always seem logical to begin washing at the top and work down, but there are many experienced wall washers who contend the walls should be washed from the bottom up. Especially if the wall is badly soiled, the trickling down of the cleaning solution over the dirty surface below often causes streaks that cannot afterward be removed without difficulty. But dirty tricklings over a freshly cleaned surface are easily removed.

While natural sponges have long been in use, we favor the cellulose sponges which permit more pressure against the wall. They also have a better scouring surface. Brushes are sometimes used for cleaning painted walls but, except in the case of very rough walls, are less practical than the more absorbent sponges which better retain the cleaning solution.

Another method for wall washing

which is becoming more popular, is by use of cellulose floor mops. Except where the ceilings are very high in the older buildings, a man of average height can stand on the floor and wash the wall with a mop. This method is less practicable for cleaning the ceilings.

To utilize this method on the walls the mop should be squeezed out sufficiently to prevent trickling and an upand-down movement should be used. It is well to have two mops, one with a bucket of clean rinse water with which the solution mopping is promptly followed. In fact, the job is quickest and easiest done with two operators, one for each mop. For the final application on the wall each mop should be squeezed as dry as possible.

The mop method eliminates the need of ladders or scaffolds and climbing up and down.

The wall washing machine is an ex-

Vacation time in our schools is the busiest time of the year for those concerned with the maintenance of school buildings... This review of the basic jobs to be accomplished during the summer offers general guidelines and "how-to-do-it" hints for administrators of the summer renovation program...



- Clarke Floor Machine Co

In the way of general renovation, schools have a decided advantage over most other large buildings which are occupied the year round. Particularly in the northern three fourths of the country, all buildings suffer from inadequate maintenance during the winter, not only because of the effects of bad outside conditions which are brought into the building but from smoke and dust which originate inside, all of which usually adds to the general winter burden of the maintenance crew.

It is a break for schools that the less effective cleaning of the winter can be fully compensated for during the period of summer vacancy. The big job of renovation can proceed then with little or no interference. The walls, windows, venetian blinds, the chalk boards, and furniture must be cleaned and possibly the desks must be revarnished. But the really big task is doing over the floors, that part of the building which suffers most from traffic anytime and more so during the winter. Because the floors constitute the biggest problem of the summer renovation, we will discuss them last and begin with the lesser jobs of which the walls seem to be the logical beginning.

cellent device for cleaning walls as well as ceilings. While most of these machines require the same amount of manual rubbing, the cleaning solution is forced by air pressure from the tank on the floor up through tubes to the cleaning trowels, around which are wrapped and clamped small terry towels. The flow of the solution is controlled by a trigger on the trowel, which prevents an excess amount on the wall. There are usually three trowels, one for the cleaning solution, one for rinse water, and an unattached trowel for drying the wall. The latter hangs on the operator's belt while he has one of the other two in each hand.

The special advantage of the wall washing machine is the convenience of always having the solution and rinse water at the wall. There is no getting up and down to change water. Another important advantage is in cleaning con-

tinuously with clean water. By the bucket and sponge method you are soon washing the wall with water that becomes progressively dirtier.

One more important fact to remember in washing walls is the efficiency of the cleaning solution. No method will do a better job than the cleaner itself permits. Before starting the job, test your cleaner on a soiled wall.

In the case of extremely dirty walls, such as those over radiators, a little abrasive powder sprinkled on the sponge will work wonders, but may dull the surface of a glossy painted finish.

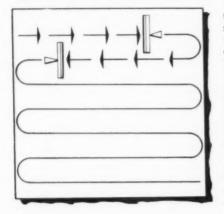
Acoustical walls can often be cleaned with wallpaper cleaner. If unpainted and badly soiled, use dry steel wool. If to be painted, use a flat-finish paint which is less reflective of sound than the glossy kind.

Simple as window washing may seem a better job can be done quicker where

washing walls

a system and some skill are employed. Professional window cleaners often add only ammonia to the water. In one hand they have a brush for the water and a window squeegee in the other. This method, of course, does not apply where high windows must be reached with a long handled brush and squeegee, but, where possible, it is better to use the first method, even if a ladder is needed.

With one hand the window is washed and with the other the squeegee is rubbed horizontally (side to side) from top to bottom without removing the squeegee from the glass. To remove the squeegee before covering the entire glass will result in a streak when you apply the squeegee again, in which case



the squeegee must be dried before resuming its use. Experts clean even fairly large panes by the horizontal method "in the bat of an eye." a tedious one. Frequent vacuum cleaning of the blinds throughout the year makes the summer cleaning easier and more effective.

Where the blinds are so badly soiled that on-location cleaning may be unsatisfactory, take them down and open them up in a vat of convenient size. An old bath tub is ideal for the purpose. Lay a strong strip of timber (2 by 2 or 2 by 4) lengthwise across the top of the vat and after mixing the cleaning solution in the vat, lift one end of the blind on to the strip of timber, holding with one hand until you can scrub that part of the blind with a brush. Then push the cleaned portion over the strip and repeat the cleaning. After two or three portions have been cleaned, the blind will hang on the strip without holding. Clean the tape as you proceed and, when the end of the blind is reached. turn the blind over and clean the other side. Rinse and hang up to dry. It is not as slow and difficult an operation as it may seem, providing you are prepared ing with the glue residue which holds the chalk crayons together forms a glaze which detracts from the "bite" of the chalk on the board.

However, upon instructions of the manufacturer, certain metal chalk boards are being washed regularly. Experts here claim the proportion of glue in chalk crayons is negligible. If you have "regular" blackboards, however, we would not recommend washing them.

When chalk boards are washed, and where plain water is less effective, add a small quantity of nonalkaline synthetic detergent and wipe dry with a chamois skin. We would not use soap in any case as it tends to leave a scum.

cleaning venetian

Often venetian blinds can be cleaned without taking them down, especially the metal blinds with plastic tapes. A cloth wetted with a good synthetic detergent usually does a good job, though

cleaning chalkboards

There are special preparations designed for cleaning chalk boards. Dry rubber sponges are also used. There is a generally accepted belief that water should never be used on chalk boards. According to one authority, water mix-

resurfacing school desks

When necessary to resurface school furniture, a good cleaning with a synthetic detergent is the first step. Soap-saturated steel wool pads will remove many of the stubborn stains, or regular steel wool with the synthetic detergent will serve.

If desk tops are badly scratched or defaced, sand them down with an edger which is a small, disk-type sander held in the hands

If the scratches simply penetrate the varnish, use one of the new paint and varnish removers which almost instantly cause the old finish to shrivel up and detach itself and it is easily scraped off. Remove all wax or other traces of the remover with naphtha and apply a good varnish. Regular floor sealers are not always adapted for varnishing furniture. They are tougher than regular varnish but more flexible and sometimes soften under body heat.

four keys to better painting

The surface to be painted must be sound and properly prepared

Make sure moisture, paint's enemy No. 1, cannot get under the paint.

Remove all loose paint, grease, and excessive dirt.

Prime bare spots.

Use the paint for the purpose it was intended.

Unless you have tested newer paints on the market for your use, stick with the standard items used successfully for several years. Use the paints where they were intended to be used: floors, metals, exterior trim, etc.

Comply with the manufacturers' directions.

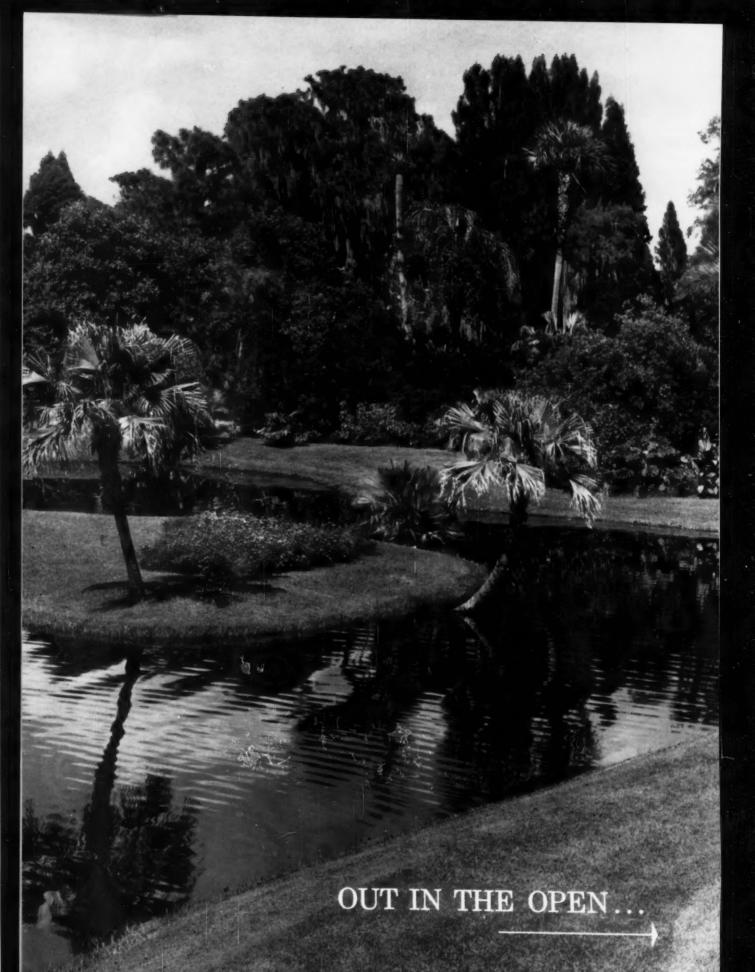
Follow manufacturers' directions as to how much paint is needed to cover how many square feet. Overthinning is false economy.

Determine proper workmanship in paint application.

Have your painters adjust their techniques to the different properties of different paints.

renovating the floors

After nine or ten months of continuous use under many stamping, scuffing feet, even the best of routine cleaning has been







American Seating brings the <u>facts</u> about school furniture out in the open

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- 1 Does the furniture provide adequate work space for the student?
- 2 Is there sufficient storage space?
- **3** For student comfort, are the seats and backs properly contoured?
- 4 Are the tops and seats adjustable to fit students?
- **5** Does the furniture provide maximum function in minimum space?

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A MESSAGE FOR YOU

ABOUT THE NEW

INDIVIDUAL Study-Center

From time to time you've probably asked yourself questions like this: "How can I be certain that the school furniture I buy is my best investment?" "Is it designed to benefit student and teacher alike?" "Am I getting what I need and can afford in terms of quality?" "Will the furniture match my financial obligation in relation to service life?"

Here is a modern unit that can meet all these requirements. It's American Seating's Individual Study-Center, the newest, latest, and greatest advance in reducing classroom distraction. How can you find out more about this new advance? The easy way is to let an American Seating representative arrange a demonstration.

In the meantime, send for our new booklet, *The Facts about School Furniture Today*. It tells you what to look for in school furniture.



The standard by which all other public seating is measured

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Send for free booklet, The Facts about School Furniture Today



quite unable to preserve either the sanitation or appearance of the school floors. A good scrubbing, often a scouring, is needed to restore most of the floors.

While the process for cleaning the floors is pretty much the same in all cases, the material to be used often differs.

Terrazzo and Marble: Steel wool, which is excellent for use on all the resilient and wood floors, should not be used on terrazzo or marble. Small fragments of the wool left on the floor may rust and cause a difficult stain. To scrub terrazzo or marble, we recommend one of the synthetic (soapless) detergents. To scour a very dirty floor, use one of the new widely advertized abradant pads.

A nonalkaline abrasive powder, sprinkled freely on the wet terrazzo or marble, and scrubbed with a stiff brush, also provides satisfactory scouring action, but all residual grit should be well rinsed off, preferably picked up with a vacuum cleaner. Scour only a limited area at a time before squeegeeing or vacuuming off the dirty solution or the latter may settle back into the floor.

Acids will dissolve marble, and terrazzo is about 70 per cent marble chips. Alkaline solutions fill the tiny surface cells of marble, dry, and expand, breaking the cell walls and causing spalling or "dusting."

After the terrazzo or marble has been well cleaned and all wax (if any) removed, the floor should be given a thin coat of colorless terrazzo sealer, well rubbed in. This will fill the surface cells without leaving a surface film and make the floor easier to maintain.

Resilient Floors: The adaptable methods vary for cleaning the resilient floors, which include asphalt, rubber, vinyl, and cork tiles, and linoleum. For example, solvents, oils, and greasy substances soften or dissolve asphalt and gradually cause the deterioration of rubber. The vinyl floors are comparatively immune to all regular cleaners, even to such alkali as tri-sodium phosphate, but even mild alkalies are injurious to cork tile and linoleum.

The nonalkaline, synthetic detergents may be used with safety on any resilient floor and are generally recommended for the purpose. Soaps should not be used on rubber but mild alkalies are permissible. However, alkaline solutions in excessive quantities may penetrate between the tiles of any floor and attack the adhesive. In fact, excess water can be detrimental on any resilient floor and only enough should be used to obtain desired results.

Steel wool or the abradant pads are valuable in scouring any of the resilient floors. No. 2 grade wool may be used with soap suds, wax stripper, or a good solution of synthetic detergent, but no coarser than No. 0 wool should be used with clear water or on a dry floor, the exception being on stained cork. Very scarred or stained cork tile may be sanded, preferably with a regular floor machine, but first try dry No. 2 steel wool.

Abrasive powders and water may also be used for scouring the resilient floors, though excessive scouring may dull the natural gloss of some floors.

After the resilient floor is clean and dry it should be promptly waxed to prevent resoiling. The water waxes may be used on

any of the floors or one of the emulsified resin finishes may be applied. Solvent waxes are recommended for cork tile and may be used on vinyl and linoleum but not on asphalt or rubber.

Lacquers and varnish should not be used on any of the resilient floors, the exception being that one thin coat of penetrating floor sealer may be used on freshly sanded cork tile. Solvent wax (paste or liquid), however, is preferred in such cases.

Wood Floors: Unless the wood floor is to be re-sealed it is easiest cleaned with a solvent-type cleaner, or by thinning down a solvent wax with high-flash naphtha and scouring with a floor machine and steel wool. Use old mops to remove the dirty solvent.

If the wood floor is to be resealed, all wax must be removed first. A wax stripper with steel wool or abradant pad serves best for the purpose. If a trace of wax remains the sealer will not adhere properly.

If the old sealer is worn through in places, patch the places with the sealer, beginning in the middle and "feathering" out to the edges. When dry, rub down with steel wool and go over the whole floor with the sealer.

Where the old coat of sealer is discolored or badly worn, it may be removed by sanding with a drum sander which can sometimes be rented. Or a seal remover may be applied. The latter is a chemical mixture like that suggested for furniture, which causes the old sealer to wrinkle up and detach itself so it can be scraped off. A wire brush is good for the latter purpose.

The above methods for renovating wood floors, of course, applies to the gymnasium floor. Naturally if a sander or chemical remover is used, the court markings will have to be replaced. This is usually done after an application of penetrating sealer. When the markings have dried, two coats of "gym finish" (heavy bodied) sealer are applied. Always steel wool between coats to insure a better bond and if the final coat is steel wooled, the glossy glare will be avoided and heavily used areas will be less likely to show wear.

Concrete Floors: Concrete may be safely cleaned by any of the methods described in the foregoing. If the floor "dusts," a hardener should be applied. A coat of penetrating sealer also checks dusting. Or the floor can be made attractive and more easily maintained with two coats of an alkali-proof, rubber resin enamel, especially designed for concrete.

Ceramic Tile: Synthetic detergents are recommended for cleaning ceramic tiles. Nonglossy floor tiles may be scoured with the detergent and an abradant pad, or with an abrasive powder. Steel wool may tend to darken the hard tile. Soaps are not recommended because they may leave a scum and alkalies attack the grout between the tiles.

After a nonglossy, ceramic tile floor has been cleaned and dried, to prevent early resoiling a coat of terrazzo sealer may be applied or a nonslip wax may be used.

Properly cleaned and properly treated school floors should be easily and successfully maintained, at least until the Christmas holiday vacation period, when some of the operations described above may need repeating.



"It is a break for schools
that the less effective cleaning
of the winter can be fully
compensated for during
the period of the summer
vacancy..."





A sketch of Public School No. 27, Paterson, N. J. Architects for the school were Lawrence C. Licht and Frank E. Johnson, Englewood, N. J. Superintendent in Paterson is Michael Gioia.

A K-8 School for an Urban Area

In planning Paterson's most recent elementary school, every effort was made by the school administration and the architects to provide a school plant which would include the objectives of the elementary school educational program. As the first step in the co-operative planning, the superintendent of schools appointed a committee of assistant superintendents, elementary school principals, special subject supervisors, and classroom teachers who worked with the architects, educational consultant in the development of recommendations for room requirements and the way in which they should be treated to provide for the educational program.

All recommendations of this planning group were reviewed and evaluated by the

superintendent of schools and were finally presented to the board of education for its final approval.

The resulting directive from the board to the architect provided for a school especially designed to meet the requirements of the Paterson curriculum. Moreover, in transmitting these requirements to the architects, the superintendent suggested relationships and special features which would be helpful in the development of the local program.

The building which resulted has demonstrated after a period of use that the planning by both educators and architects was well done, and that there had been a high degree of co-ordination of the thinking of both professions.

Building Arrangement

In order that children of similar ages might work and play together with some degree of separation from other age and grade groups, the building consists of three clasroom wings each planned to meet the needs of the primary, the intermediate, and the upper grade child. Classrooms in each of these units are planned to provide the best learning environment for children and the most favorable working conditions for efficient teaching for the age groups which they serve. Each of the three units has its own play area, separate entrance, and stormy weather shelter.

These separate units are all adjacent to the central structure which contains the

Rooms for broadening the curriculum —



Above: the school's home economics room which together with the art, social education, and industrial-arts room, comprise the facilities for special instruction for students in the upper grades.



administrative offices, the health clinic, the industrial-arts room, the gymnasium and the auditorium, and teachers' rooms. Also associated with this central area, but served by separate entrances, playgrounds, and toilets, are the kindergarten and the special education room.

The classroom design is the result of close co-operative planning of groups of classroom teachers working with the supervisory staff and the architect and his educational associate. Rooms are provided with work counters, sinks, storage and clothing facilities, chalkboards, exhibition boards, and special library shelving and work counters under the windows.

Rooms are provided with adequate natural light properly engineered for light and sun control with extruded solar canopies. This natural lighting is supplemented by modern fluorescent fixtures. Each room has individual automatic heat and ventilation control. Attractive color treatment of walls, floors, and furniture and acoustically treated ceilings provide an environment conducive to pleasant and efficient working conditions for pupils and teachers.

Special Facilities

Special rooms for art, economics, and manual training are provided to meet the educational needs of upper grade children. These rooms were planned with the special supervisors of the various departments and contain all of the facilities required in a modern program.

The gymnasium and its associated facilities provide play courts, showers, lockers, and dressing rooms,

An auditorium adequate in size to provide for six classes is provided with a fully equipped stage for music and dramatic activities. This auditorium is adjacent to the gymnasium and is separated from it by



Outside and corridor wall views of typical classrooms in Paterson's PS 27. Primary classrooms have individual toilets and individual room clothing closets, while the intermediate and upper grades have corridor lockers.

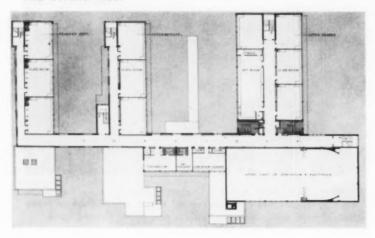




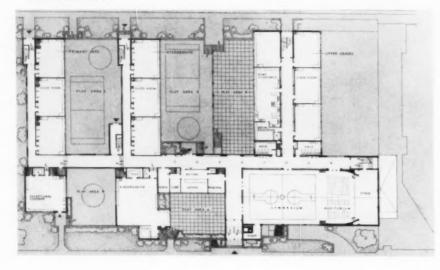
The auditorium (left) is adjacent to the gymnasium and separated from it by an electrically operated folding door so that the two rooms can be combined to accommodate the entire school for music and dramatic activities. Below is a view of the industrial-arts area which serves upper-grade boys.



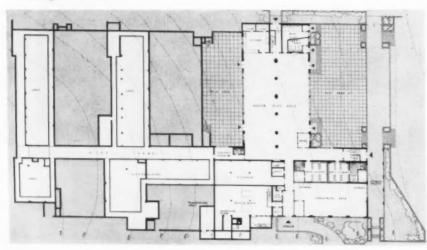
The second floor



The first floor



The ground floor



electrically operated folding doors so that it can be enlarged to accommodate the entire school. This arrangement is proving superior to the usual multi-purpose room. The auditorium has seating always available for assemblies, music, dramatics, and visual aids. In addition, the gymnasium can have continual usage for the physical education program without the usual interruptions of a dual purpose room.

The kindergarten occupies its own separate wing so that beginning children can easily make the transition from home to school without the feeling of being lost in a large institution. The room was carefully planned by experienced kindergarten teachers who, in conjunction with the architects, visited the best facilities in Paterson and neighboring communities. The kindergarten includes work alcove, story telling center, activity area, toy storage facilities, clothing alcove, and separate toilets. Walls and floor are in colors which appeal to young children.

The special education classroom was designed by those teachers and supervisors who work with children who require special education facilities. It contains areas for both general education and special activities. It has its own separate entrance, play area, and toilet.

The administrative area includes a general office, private offices for the principal and the vice-principal, and a health clinic. Communication between the offices and any part of the school is maintained through a public-address system and individual room telephones.

Architectural Design

Architecturally, simplicity has been made the keynote to beauty, with attractiveness secured by the arrangement of the units and by the texture and the color of the materials. The building fits naturally into the site and "follows the grade" over a drop of some 40 feet. In order to provide for maximum play area on a small city site, two and three story construction was used, and separate play areas were provided for the various grade units.

Structurally, the building was designed to give maximum economy of maintenance over a long period of years. Masonry and brick walls, double hung steel windows, flat built up roof, and vinyl and asphalt tile floors will require minimum maintenance. The heating, plumbing, and ventilation equipment is the best and most modern and is easily serviced and maintained.

The electrical and mechanical equipment provides modern school conveniences including a master clock and classroom clocks, program bells, a fire alarm system, intercommunicating telephones, a publicaddress system, and a closed circuit television system. Cooled water and a vacuum cleaning system are provided.

The total cost of the five construction contracts including site development was \$1.338.074.

One district's experiences with remodeling and adding to an older high school to produce up-to-date, attractive facilities —

Before and After





High School Principal and Guidance Director, School District No. 9, Wheatland, Wyo.



The high school of District No. 9, Wheatland, Wyo., constructed in 1912, was badly in need of repairs. Two obstacles confronted the board in its consideration of replacing the older plant with a new building. First, a new building could only be built during the three months of summer due to a lack of an alternate location. Second, sufficient funds for new construction would be hard to obtain as the district had been designated a "Federal Drought Disaster" area.

It was felt that the time element and financial restrictions made it impossible to build a new school, so the board, wishing to create the best possible plant for the children of the school district, decided to build additions and remodel the old building.

The people voted five to one in favor of the additional \$350,000 taxation and the bond issue was floated.

The Additions

Five classrooms, two administrative offices, and a guidance office were built as a unit in a ranch style addition (97

by 66) to the east side.

Locker rooms (65 by 40) were constructed on the north side next to the football field. Rest rooms for the public were included.

A band room (51 by 42), with two practice rooms, an office, and storage room was constructed on the southwest.

The Renovation

The renovation was far more complicated. The main plant was "gutted." Fireproof stairs were placed in the three-storied building. To provide more hall space a new addition (23 by 8) was created for the second and third floors on the east side. Two new fire escapes were built. The building was rewired and a boiler-burner unit was installed.

On the lower floor two classrooms were reconditioned and the "recreation room" stage was closed off into a locker room for the agriculture department. The custodian was given ample storage space by creating a room from a long, narrow corridor. Two rest rooms were reconditioned.

On the middle floor, three classrooms were renovated and there was a complete remodeling and enlargement of the home economics department. A new teachers' lounge with separate rest rooms for the faculty was attractively done. A new supply room was placed on this level.

On the upper floor, a new commercial department of three rooms was created. The study hall was enlarged when separate quarters was given to the library. Student rest rooms were placed on both sides of the study hall. A new chemistry-physics room was built.

The floors of all the rooms and halls were tiled and acoustical tile was applied to ceilings.

The Right Choice

Those patrons who insisted that a new high school be built at triple the cost of an addition and the refurbishing marveled at the finished product. Wheatland's school board, after careful analysis wisely prepared for the future when increased enrollment will place increased pressure on the local high school.

Illustrations of the "before and after" in Wheatland's high school —

— Photographs by Dr. L. B. Secrest





the study hall





the home economics kitchen





a typical classroom

In-Service Custodian Training

G. H. GROSENICK

Former Superintendent, Ashland, Wis., Schools

For a number of years much emphasis has been placed on in-service training programs for teachers. From what the writer can ascertain educators quite generally approve of such programs. Obviously much improved classroom instruction has resulted.

It was our feeling here at Ashland, Wis., that a similar degree of accomplishment within the field of maintenance could result from properly planned in-service instruction of our custodians.

Good Maintenance

Good maintenance concerns itself with at least four things and if adequately carried out will contribute greatly to the child's welfare, safety, and comfort while in school.

To begin with, good maintenance is concerned with sanitation. Sanitary surroundings are important to the child's welfare and health. School-age children are entitled to clean classrooms, cafeterias, drinking fountains, rest rooms, etc. Clean facilities and equipment also reduce the hazard of spreading disease.

Good maintenance also means safety. Keeping combustible materials in safe containers, fastening loose hand rails, replacing faulty stair treads, repairing damaged playground equipment and keeping fire extinguishers properly charged are a few examples of what is meant by good building maintenance for safety's sake.

Third, good maintenance will add years to the life expectancy of a building and its contents. Whether one thinks of window sashes in dire need of paint or walls in need of mortar, or chairs in need of glue, proper preservation of a building and its equipment must be pointed to constantly in working and planning with school custodians. Too often janitors are willing to accept what they find and do little toward improving a given situation.

Finally good maintenance spells beauty. Little need be said here to point out what is meant. A building that is well maintained will have a fresh and attractive appearance. The morale of students and staff members is bound to be higher in buildings that are well kept. Students also tend to be less destructive to walls and equipment that appears well cared for.

In-Service Meetings

All these things being true, it was our feeling that custodians and maintenance men should be asked to participate in monthly in-service meetings. This has been going on at Ashland for the past two years with a high degree of success. At these meetings all facets of building maintenance involving the custodians and maintenance staff are discussed. The men attend demonstrations, talks, movies, and discussions covering a wide range of topics. Fire fighting methods and handling of apparatus, floor maintenance, safety about the building, use of cleaners and disinfectants, personal appearance of personnel, etc., are a sampling of the areas that have been explored

A typical meeting begins about 1:30 in the afternoon on a date scheduled far enough in advance so that the custodians can make arrangements to be gone from their buildings for several hours. The place of the meeting is usually determined by the type of program to be presented. Naturally a demonstration for handling fire fighting equipment is held outside and away from buildings. A demonstration on the use of waxes and seals is held in a room where a floor has been allowed to

deteriorate enough so that the results are rather striking.

The business manager has charge of the custodial staff in the Ashland schools and is, therefore, held responsible for the conduct of the meetings. The planning is usually a joint effort on the part of the business manager and the superintendent of schools. The persons actually participating in the program are invariably people especially versed in the field under consideration. A salesman, the local fire chief, a boiler manufacturer, the local health officer, and persons from the state department of public instruction have served as resource people for the meetings. A number of fine films available from commercial firms have been used. At times selected members from the custodial staff itself have conducted demonstrations because they do a certain job in a rather efficient and effective way.

The custodians and maintenance personnel have reacted enthusiastically to most of the programs. It is noticeable that these in-service meetings are real morale builders.

At Ashland's monthly custodian meetings, the district's maintenance men attend demonstrations, view movies, and join in discussion on various topics of building maintenance. At the right is a view of a demonstration by a custodian on the use of a new cleaning compound. Business manager in Ashland is Robert A. Cory.



WORD FROM WASHINGTON

Congress Considers Teachers' Salaries

ELAINE EXTON

One of the fundamental education issues before the Congress is whether, to improve our American educational system, the Federal Government should underwrite local and state financing of public schools by using national tax-gathering resources to provide money to the states for school construction and teachers' salaries.

This question is posed by the reintroduction of the NEA-backed Murray-Metcalf bills (S. 2 and H.R. 22) which were sidetracked in the previous session by the Sputnik-sparked concern with defense edu-

cation legislation.

The possibility of providing federal funds for public school teachers' salaries adds a new dimension to the proposals for furnishing federal aid to school construction which have been widely debated in the Congress during the past five years. What should the proper role of the Federal Government be with regard to pay for teachers has attracted a good deal of study and discussion in recent hearings before the education subcommittees of the House and Senate.

Their examination of this problem has been heightened by the omission of federal financing for teacher pay from the Administration-sponsored school construction debt-service plan embodied in H.R. 4268, introduced by Representative Peter Frelinghuysen (R., N. J.), and S. 1016, sponsored by Senator Thruston B. Morton (R., Ky.) with several others.*

Effects of Inadequate Salaries

At the Congressional hearings considering school support bills, a stream of witnesses emphasized the importance of paying high enough salaries to attract and hold the quality teachers that school systems need. The unfortunate effects of inadequate pay levels drew comments from Congressmen, a wide range of educators, and spokesmen for national organizations concerned with women's activities, labor interests, veteran's affairs, and civic fields. National Education Association Presi-

dent, Ruth Stout, the lead-off witness told the committee members: "We know that higher salaries are the key factor in securing and retaining qualified teachers in our classrooms. Until we raise the salaries of teachers to a level that compares favorably with the salaries paid talented persons in other areas, we cannot hope to provide able and competent teachers for all children throughout the United States.

"Few people realize that the average salary for all classroom teachers in the United States — experienced as well as inexperienced, teachers with doctorates as well as all other levels of preparation — is less than \$4.800. This is nearly \$500 below the average beginning salary that recruiters for industry are offering on college campuses this winter to young men who will graduate in June. In this year of 1958–59, only one teacher in five is making as much as \$5.500."

To meet any reasonable estimate of a professional level of compensation, teachers' salaries would have to be at least 60 per cent above their present average level, according to testimony presented by Walter W. Heller, chairman of the Department of Economics at the University of Minnesota, on the basis of "careful studies by the National Education Association."

Reporting that "to some extent. standards for teachers have been held down to match the salary level," he pointed out that "young people with only two years of college education can still get elementary-school teaching certificates in a fourth of the states. . . . Although the great majority of teachers do have college degrees and many have advanced degrees, more than one fourth of our elementary school teachers are not college graduates.

"Even with low standards of admission," he continued, "some states have found it possible to staff their schools only by accepting teachers who have not obtained regular teaching certificates. This year, 7.4 per cent of our public-school teachers are working on temporary or emergency certificates—a portion of 1 in 13. And this is a continuing condition that has shown no improvement in the past eight years."

The truth is that our teachers do not earn a living wage, declared Peter T. Schoemann, vice-president of the American Federation of Labor and Congress of Industrial Organizations.

He said: "The United States Department of Labor's 1951 City Workers' Family Budget, up dated as to prices and taxes to 1958, shows that a worker and his wife, with two children, require at least \$4,656 per year for a 'modest but adequate' standard of living. Thus the teacher's average annual salary of \$4,520 leaves him with only a subsistence wage level. He is not meeting the minimum \$90 per week required each week of the year. The way he most often makes ends meet is to spend the summer and holidays working in some routine job instead of using this period to improve his worth as an educator."

His remarks were amplified by Carl J. Megel, president of the American Federation of Teachers. AFL-CIO, who stated: "Because of inadequate salaries and employment insecurity, there is a shortage of some 250,000 qualified teachers — with a minimum education of a Bachelor's de-

"America's teachers should be paid a professional salary commensurate with their ability and training. The American Federation of Teachers considers the salary schedule which starts at \$6,000 and reaches \$12,000 to represent the professional salary for America's teachers. Yet, in 1958, the average of all teachers' salaries in America was approximately \$4,200. Salary increases secured by teachers during 1958 were insufficient to keep pace with

the rising cost of living."

Determining the Federal Role

That in many instances teachers' salaries are too low, none of the witnesses denied. Replying to Congressional questions K. Brantley Watson, vice-president in charge of Human Relations for McCormick & Company in Baltimore, a spokesman for the U. S. Chamber of Commerce, said: "We do not for one second feel that teachers generally are compen-

[&]quot;For a description of the Murray-Metcalf and the Administration bills see "Federal School Assistance Proposals," the Word from Washington story in the April, 1939, issue of your JOURNAL.

sated relatively as adequately for their services as they should be. . . . We would not for one second say (teachers' salaries) should not be increased, they should."

ries) should not be increased, they should."
"No conclusion," he reiterated, "is suggested or implied that too much money was or is being spent on the schools. Quite, the contrary. We believe that even greater investments in education are called for in the years ahead, and that they will, if wisely applied, yield high returns to the American people. . . .

"The National Chamber will continue to urge business leadership and co-operation in such state and local action to build and maintain good school systems. We are convinced that this is the only means by which people in those communities and states can have the schools which they believe proper for their children."

It is on the question of whether the financing of public schools should be wholly a state and local responsibility or whether the Federal Government should provide broad-scale monetary aid to undergird state and local efforts to support public education that sentiment divides.

As Senator Ralph Varborough (D., Texas) put it. "I think that we all recognize, all who are on this committee and who have appeared before it, the need for stepping up our educational effort in this country and improving our schools, the differences between us are as to the method or type of law that would best accomplish the objective."

Arguments for Federal Aid

Through introducing or sponsoring bills substantially the same as the Murray-Metcalf legislation at least 60 members of Congress have indicated their belief that this measure authorizing federal funds for the states to use for teachers' salaries or school construction as they determine provides the means for appropriate federal action.

Commented Senator James E. Murray (D., Mont.), chairman of the Education Subcommittee of the Senate Committee on Labor and Public Welfare: "The National goal should be provision of safe, suitable, and adequate education for every American child. To provide this we need tens of thousands of new classrooms and teachers. We need better teachers and we need to keep the many good ones who are teaching now."

Senator Lister Hill (D. Ala.), who chairs the full committee, concurred, remarking: "Effective teaching and effective learning depend both upon adequate facilities and a plentiful supply of qualified teachers. Both cost money, more money than we can supply from our state and local revenues. But in my mind, I think that our country can afford both, and I think we should." "In my view." put in Senator John

"In my view." put in Senator John Cooper (R., Ky.) "Teachers' salaries . . . are more important than school room construction, important as that is, I would rather spend this money, if we are going to spend it, on teachers, than even upon school room construction."

Representative Stewart L. Udall (D., Ariz.) hammered the point "that because of the over-riding national security interest the entire tax-base of the nation be used to make contribution to the schools."

Representative John F. Baldwin (R., Calif.) likewise called the "proper training of our youth" a matter of tremendous federal importance to the future," saying "it seems to me that the future of this country internationally is going to depend on whether we can continue to compete with other countries in improving our educational training and standards. For that reason I think the Federal Government has to take an interest in this problem."

Taking a similar stand, Congressman John Lesinski (D., Mich.) declared: "If we are to triumph over those opposing idealogies that seek to destroy our form of Government, we must see that . . . the boys and girls of America who will grow up to be our future citizens . . . are trained and ready to meet the challenge."

Congressman Clement W. Miller (D., Calif.) called on opponents of the legislation "to re-think our educational program and processes in terms of modern realities rather than in terms of some . . . ideas that may have existed years ago that somehow or other the Federal Government is going to reach down into the mind of the teacher purely because it is a federal dollar."

federal dollar."

To critics "who will insist that this is purely a local problem, and that federal aid will mean federal interference with our children in the several states, the answer is 'no'" responded Representative Frank M. Coffin (D., Me.). Agreed Congressman James Roosevelt (D., Calif.) "Neither the intent of the supporters of the Metcalf proposal nor the intent of the measure itself is to bring federal policy into school administration, curriculum, and so on."

Dissenting Views

While the legislation attracted some bipartisan backing, it also revealed a divergence in views within party lines. Although Senator Jacob K. Javits (R., N. Y.), for instance, maintained that "it is just as essential to have available money to supplement teachers' salaries as to build classrooms," Representative Carroll Kearns (R., Pa.) contended "when you start subsidizing teachers' pay, it is socialism."

Questioning the need for federal action to subsidize teachers' salaries, Representative Peter Frelinghuysen (R., N. J.) predicted that if such a provision is left in the bill the provision "will kill it on the (House) floor."

If we did have a federal program of subsidies for teachers, he argued, there would logically follow from it a necessity to see how that money is being spent and whether it is being spent in appropriate ways. "It would give us a direct interest in the adequacy of the teaching if we helped foot the bill for their salaries," he claimed.

The Administration's Stand

Noting that Secretary of Health, Education, and Welfare Arthur Flemming, at ceremonies marking the dedication of the National Education Association's new Headquarters Building on February 10, had expressed himself as willing to agree on the doubling of teachers' salaries as a reasonable national goal. Representative

John R. Foley (D., Md.) voiced "regret that he and the Administration leaders did not see fit to include in their deferred school construction program introduced just the previous day (February 9) provision for increasing teacher salaries."

In appearances before the House Subcommittee on General Education chaired by Cleveland M. Bailey (D. West Va.), Secretary Flemming explained his views as follows:

"I appreciate the fact that the other proposals (pending before your committee), at least some of them, would make it possible for the Federal Government to make grants which could be used, if the state and local school districts so desired, for salary purposes.

"I happen to be a person who believes that one of the serious weaknesses in our educational system today is the low salaries that we pay the members of the teaching profession. As far as I am concerned as an individual I want to do everything I possibly can to help bring people around to the place where they realize that society is deliberately penalizing people who are rendering the most constructive service that can be rendered to the life of our nation today."

Here are "the affirmative steps" which the Secretary of Health, Education, and Welfare suggested "the Federal Government can take in order to help correct this . . . situation of underpaid teachers,"

which he termed "serious."
"I think, for example, that those of us

who occupy public office can, in season and out of season, call attention to the fact that under present conditions we just cannot hope to attract and retain A-number-1 men and women in the teaching profession.

"The second thing I think we can do is this; that we can work with public and private groups in order to obtain agreement on what constitutes a fair and adequate salary structure for teachers.

"In the third place, it seems to me we can as a Federal Government, and I don't think we have done nearly enough of this, turn the spotlight on the communities which have come to grips with this problem and are paying fair and adequate salaries.

"In the fourth place, as a Federal Government, I think we can provide financial help for the construction of classrooms for school districts that are already making a reasonable tax effort for such purposes and in this manner release funds for salaries that would otherwise have to be invested in buildings.

"I believe by using these and other devices we can launch a move that will result in higher salaries in many school districts. Once this movement gains momentum, other school districts will be forced to join in because we know the demand for A-Number-1 teachers is in excess of the supply. The school district that does not increase its salaries will find itself in a position where it will be unable to recruit satisfactory teachers.

"Now, I think that we should exhaust all efforts along this line before we give serious consideration to (the Federal Government) making grants for salaries for teachers."

Surveying School Scene

great success in discovering and developing abilities of economically and socially handicapped students.

The program functions through guidance, counseling, small financial and other assistance, through much individual attention in half-size classes. It also provides trips to the theater, ballet, industrial plants, sports events, and other cultural experiences available more easily to middle-class children.

The board of education recently approved the budget request for \$500,000 to permit expansion of the work to 30 schools next September in five areas largely populated by Negroes and Puerto Rican minorities. In each area there will be one junior high school, together with several feeder schools and certain high schools, to which students will be scheduled. The expanded project will involve about 60,000 children.

An important phase of the project is an expansion of the special guidance services -offered to all students, including those with average and low I.Q. scores as early as third grade in the elementary schools. Ten additional guidance counselors will be assigned to five junior high school and 11 counselors to 11 elementary schools. In addition, full-time specialists will consult with junior high school teachers on the basic skills of reading, mathematics, science, and the languages. The elementary schools will receive additional remedial reading teachers.

Purposes of the Citizen Advisory Committee

In this Michigan district the duties of the citizen advisory committee were defined in detail . .

- The Standish-Sterling, Mich., schools have defined the purposes of the local Citizens Advisory Committee for Educational Improveon local, state, and national educational matdistrict to support programs or policies which

they feel are beneficial to the schools; (5) to serve as public relations agents to help develop understanding between the school and the community; and (6) to evaluate annually the progress made toward accepted objectives. In addition, the "Constitution" of the committee states that the committee shall not be expected to concern itself with personnel problems or the actual operation of the school, these responsibilities lying directly with the hoard and the administration.

A Code of Professional Ethics

The Neptune Township Schools, Ocean Grove, N. J., have adopted a code of professional ethics for teachers and members of the staff. The code seeks to promote profes-sional ideals and standards of conduct, to increase the zeal, pride, and loyalty of teachers, and to raise the service efficiency of the teachers and others with whom they are professionally associated. The code, prepared by a committee of teachers and adopted by the a committee of teachers and acopted by the entire staff and the board, is divided into three parts: (1) ethical principles within the profession; (2) ethical principles with the board of education; and (3) ethical principles with the community.

The section of the code relating to ethics within the profession includes such significant paragraphs as the following:

11. There should exist between teachers and executives the confidence which arises from a complete understanding and the mutual attitude of co-workers in a great cause. Each one should maintain a justiunuerstanding and the control of the other. Each one should feel that his success is impossible, without the corresponding success of the other.

12. The superintendent should endeavor democracy of organization in his schools. Each indi-vidual teacher should possess the greatest freedom to render service. The superintendent should be recog-nized as the professional leader of the school system, but a teacher's right to self-expression should be re-spected. Each member of a system should be given opportunity to collaborate in the solution of the professional problems. When the policy is finally de-termined, it should be loyally supported by all.

14. Each teacher is entitled to statements of his professional record, whether favorable or unfavorable, and may properly make requests for such standards. No adverse comments regarding a teacher's work should be made by a superior officer in the presence of other teachers

Relations With Board

In their relations with the board of education, the teachers insist that they must first of all, adhere to the teaching contracts which they have made and show due respect to the community and loyalty to the schools. They are asked to remember "that boards of edu-cation are the elected representatives of the people, serving without compensation to look after the educational interest of the community. The teacher's attitude toward them should be actuated by good will and confidence.

Relations With Parents

In their relations with parents and children, the Code requires that the teacher be openminded and constructive, and make every effort to keep the parents informed of the progress and standing of their children. Teachers should establish completely friendly and co-operative relationships with the home for the purpose of developing helpfulness and mutual understanding.

Community Relations

Among the significant statements of ethical principles in community relations, the Code states:

1. As a member of the municipality it becomes the

Help for Economically **Deprived Students**

How the New York school's successful "uplift" program for students in deprived areas overcomes, by use of more counselors, the cycle of "low income and low achievement" . . .

New York City's pioneering attempt to break the vicious cycle of "low income - low educational achievement - low income, etc., of pupils in deprived areas, begun as a six-year pilot program in 1956, will be greatly ex-panded. The experimental project has shown

ment to be: (1) to keep itself well informed ters: (2) to assist the board of education and the professional staff in deciding what should be taught in the schools; (3) to assist the board of education in the development of public policies which affect the students, parents, citizens, school facilities use, and financing of the total school program; (4) to attempt to persuade the people of the school

A FORWARD-LOOKING BOARD OF EDUCATION

The board of education in a community should

. . . Enlist able persons as members

Are able citizens encouraged and willing to serve on the school board?

How are your school-board members selected?

Do your school-board members belong to participate in the state and national school-board associations?

Develop school policies but not administer them

Do your board members center their enand insights upon developing basic school policies?

Do they look to the administrative staff for professional advice, leadership, and administration of policies?

Does your school board take great care in the selection of key administrators?

Does the board adopt salary schedules and written personnel policies designed to attract and hold a competent staff?

. . . Have community support

Are you acquainted with your school-board members?

Do you support the school board by constructive criticism and promotion of public acceptance of their actions?

Do you ever attend school-board meetings?

. Be fiscally independent

Does your school board have independence in levying taxes and proposing and admin-istering its budget? - From the NEA's "How Good Are Your Schools?"



ST. BERNARD BOARD PLANS CAREFULLY

Culminating a 15-year program of renovation, addition, and of modernization of the school plant in St. Bernard, Ohio, schools, the current board of education has carefully planned this work to avoid bonding the district. Members include, from life to right: Joseph Kaestle; Henry Coors; Ernst Manthey, vice-president; William Schumacher, president; Paul Winter; Crawford Bower, superintendent of schools.

duty of the teacher to identify himself as a citizen with the life and interests of the community in which he lives. As representatives of culture, teachers should live clean and religious lives. They should be known as factors whose influence may be counted on for moral, educational, or civic betterment.

In serving the public, teachers do not forfeit their right to personal, social, political, or religious beliefs, but they should maintain them in an unob-trusive and dignified way.

Teachers are also cautioned against applying for jobs which are not known to be vacant and to fulfill all agreements which they have made

Upgrading in Salaries

What are current trends in salary schedules? The NEA Research Division's analysis of 1957-58 schedules indicates that there has been considerable advancement in the minimum requirements, in annual salary creases, in rates, etc.

Of the 1704 schedules studied: the bachelor degree was the lowest level of preparation recognized in 30.6 per cent; 20 per cent provided salaries for a sixth year of preparation and 13.6 provided recognition of the doctor's degree; median increment per year was \$183 (\$109 in 1947) and the median number was 12. Allowances for dependents were made in 5.9 per cent of the schedules and sex differ-

A Plan for Student Housekeeping

As part of a citizenship training program in the Lancaster, Mass., schools, students are assigned duties in the care, cleaning, and upkeep of the schools.

The school committee of Lancaster, Mass., has adopted a student schoolkeeping program. under which major care, cleaning, and upkeep of the school is under the direction of students. with the exception of building repairs and lavatory cleaning.

All students of grades one to twelve are participating in the plan. Each pupil is assigned a number of work-hours, at least 15 hours per student. These hours are assigned on a yearly basis and are accounted for before the close of the school year.

Students are engaged in all the major and sundry jobs necessary to keeping the school building and its grounds in a clean and respectable condition: dry mopping, washing and waxing floors, emptying wastebaskets; cleaning erasers, blackboards, and chalk trays; dusting, snow shoveling, cutting grass, cleaning walls and woodwork, washing windows, trends In administering

The Lancaster plan is a citizenship training program, designed to be an extension of the responsibility a child assumes at home when he does his share of the household and housekeeping chores. No credit is given, but participation is considered as essential as of the other required areas of the curriculum.

schools

The program in each building is under the direction of student directors, responsible to faculty advisers, and the type and amount of work is carefully regulated and administered



NORTHVILLE, MICH., HIGH SCHOOL

The new Northville, Mich., high school, a campus-type design by Eberle M. Smith Associates, Detroit, accommodates 900 pupils comfortably. The architects have planned the campus units to take advantage of the beautiful contours of the rolling country side. The cost of the building, site, and furnishings was \$2,000,000. The 110,000 square feet of floor space are occupied by the following teaching areas: administrative, guidance and health offices; 12 academic classrooms; 3 business education classrooms; 1 arts and crafts room, 4 science rooms; 2 home economics rooms and extra space to be used for serving and furniture arrangements; 2 music rooms with individual practice rooms; 1 industrial-arts laboratory; 1 Driver Training room; 1 cafeteria study hall; 1 auditorium, and 1 physical education unit with large divided gymnasium, locker rooms, etc. R. H. Amerman is superintendent.

the AMERICAN SCHOOL BOARD JOURNAL

An Independent Periodical of School Administration
William C. Bruce, Editor

DIPLOMAS OR CERTIFICATES?

IT IS difficult to believe that some school systems are still clinging to the practice of issuing eighth grade diplomas. At best there is some justification for holding promotional exercises at which certificates are distributed attesting to the readiness of children to be advanced into high school and to be enrolled in a college preparatory or a less difficult type of course.

In recent years the high school diploma has lost much of the value which was applied to it in the early decades of the present century. That value can be recaptured, particularly for the boys and girls who do not go on to college. James B. Conant, in his Study of the American High School, recommends one approach which deserves attention:

The awarding of a diploma is evidence only that a student has (1) completed the required work in general education to the best of his ability, and (2) has finished satisfactorily a certain sequence of elective courses. In addition to the diploma, each student should be given a durable record of the courses studied in four years and the grades obtained. The existence of such a record should be well publicized so that employers ask for it rather than merely relying on a diploma when questioning an applicant for a job about his education. The record might be a card that could be carried in a wallet.

A more honest expression of the inherent value of the diploma held by individual boys and girls is the differentiated diploma program of Indianapolis, which expresses rather clearly the quality of the courses which the student has completed. In Indianapolis, the four diplomas — academic, fine and/or practical arts, vocational, and general — have definite use values for admittance to a college or a higher technical school, and for information needed by prospective employers. More important than these immediate uses and satisfactions of the high school diplomas is the fact that they represent a distinct upgrading of the Indianapolis high schools and the elimination of "cafeteria style" of selection of courses.

THE SUPERINTENDENT'S JOB

THE office of the superintendent of schools has received recently considerable newspaper attention with emphasis on the difficulties and pressures under which the great majority of chief school executives must work. The discussions have been sympathetic and constructive and have implied criticisms of community groups and even of professional teachers' organizations who harass the superintendent in demanding favorable consideration of their points of view on such matters as curriculum, salaries, taxes, and school plant expansion.

As professional head of the school system, the superintendent is inevitably the center of all pressure for the correction of difficulties and failures in school policy and operation. In smaller communities, he must set right every grievance of individuals, teachers, and citizen groups. On the positive side, the superintendent is, and must be, the center of all movements for the betterment of schools, for the expansion of the curriculum and instructional services, the

school plant program, needed increases in the school income, better salary services — in a word, all that contributes to a higher quality of education and citizenship. The present ferment for the improvement of the high school is typical of other less publicized areas in which the superintendent must do more than merely carry on. Unfortunately for the individual superintendent, these leadership duties cannot be discharged without opposition and personal antagonisms. A superintendent's success in office can be measured largely by his effective handling of the opposition to his positive recommendations for a better local school system.

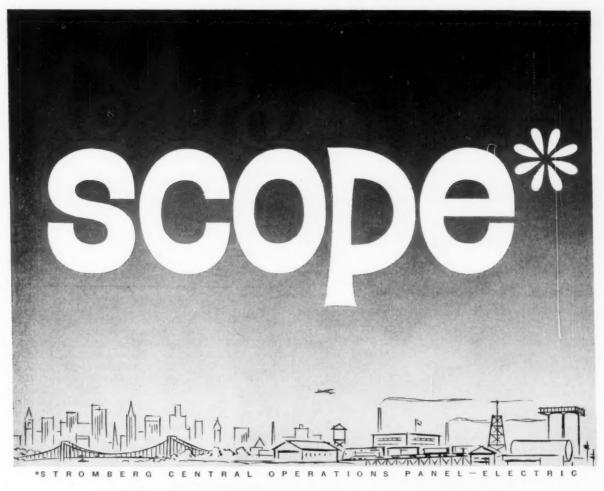
In promoting the leadership phases of the superintendent's work, the board of education has a serious responsibility. Some of this responsibility can be discharged through the written policies which place definite duties on the secondary line of school executives, the supervisors and principals, and which reserve to the board certain limitations on the pressures which are allowed to hit the superintendent himself. In other words, the board should relieve the superintendent so far as possible from the negative difficulties of management and give him both time and support in the developmental areas of his work. For this there is need of a good understanding of the superintendent's philosophy of education and of administration and a definitely co-operative understanding. Nor need the board consider the superintendent as an untouchable - an attitude which is contrary to the welfare of the schools, and in the end ruinous for the superintendent as a growing professional man. In all its relations with the superintendent, the board cannot forget the principles of justice and sound public policy in which the welfare of the children, of the community, and the superintendent are harmonized.

SCHOOL ARCHITECTURE AND ART

A MIDWEST architect who has designed a considerable number of school buildings in the contemporary style, has expressed the opinion to a state gathering of the AIA, that school buildings in the future will look more and more like factories. If this prediction comes true, we shall suffer no less than an artistic and cultural tragedy and the buildings, next to their homes, which should help the growing generation of children appreciate beauty and dignity in the buildings which represent the nation's special institution for improving our cultural life, will do the most harm to the growth of our culture than our factories and business buildings.

An architect who has built schools in the Far West, said at a 1959 AASA convention: "Why has not our educated democracy learned how to create a tradition of great architecture? The answer to this question may lie here in this room (filled with schoolmen). It is in your providence to create, through art education, the clients, the builders, and the architects who can distinguish, demand, and create the fruits of the art of architecture."

At the turn of the century, the architect who copied details from a fine Tudor, Georgian, or Spanish Colonial building, found it relatively easy to develop a school of considerable dignity and beauty. Schools by such architects as Itnner, Snyder, Wheelwright, Betelle, Perkins, and Donovan still retain a charm and dignity of which any community may be proud. Money spent for good materials and truly good design in school buildings is not a waste of public funds, notwithstanding Mr. Gerosa's opinion. Such expenditures are investments in the future culture and the growth of our democracy.



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Above: a view from the stage of the multi-purpose room of the school, showing the paneled walls and clerestory lighting and fenestration. Below: a view of a typical classroom with its extensive cabinetwork.



An exterior view of the brick and steel Marshall Elementary School in Angleton, Tex., a prefabricated plant completed at an unusual low cost. Dr. Charles M. Kelso is superintendent in Angleton.

A Low-Cost Grade School

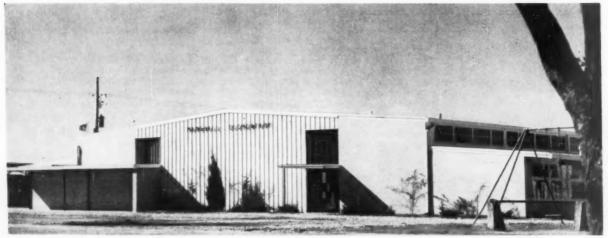
The challenge to the Angleton, Tex., school board was to build an elementary school for around \$5 a square foot. In solving this problem, the board decided upon a prefabricated steel building. The functional design placed the classrooms along the exterior walls and around a centrally located, multi-purpose hall-way.

The Marshall Elementary School has a rigid steel framework with exterior walls of brick and steel. The roof is built-up marble chip with a base decking serving as the interior ceiling.

The multi-purpose room serves as a cafeteria, a rainy-day physical education classroom, and as an assembly hall. The mahogany paneling of the room forms the backing of classroom cabinets used as lockers and for storage. Windows above this wainscot permit clerestory lighting between the classrooms and the multi-purpose room and, in addition, permit cross ventilation throughout the entire structure.

The classrooms of the school have asphalt tile flooring, acoustical lighting, and paneled walls, the backs of which serve as a chalkboard for the adjoining classroom.

(For further information on prefabricated schools, circle number SPI-2 on the **Reader's Service Section**, page 71.)



- Butler Manufacturing Company

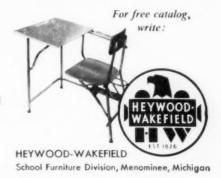
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ARIZONA

Charles W. Cooper is president of the Osborn school district board.

Mrs. R. Gail Baker is the new president of

the Phoenix elementary school board.

Terrell E. Powell is the new acting superintendent at Little Rock and Ed. I. McKinley, Jr., is president of the board.

Dr. W. H. Richardson has been elected president of the Texarkana board.

CALIFORNIA

T. Stanley Warburton has been elected associate superintendent at Los Angeles, to succeed Howard A. Campion.

Logan Wheatley is the new superintendent

at Fullerton

Richard G. Mitchell has announced his retirement as superintendent of the Beverly Hills school district. Kenneth L. Peters is his successor

COLORADO

Bruce McPhaden, president of the Yellow Springs school board, recently received the Yellow Springs "Man of the Year" award from the local Junior Chamber of Commerce. During his seven-year tenure, five years of which he was president, Mr. McPhaden has led the movement for increased school financial support which has seen (1) the electorate approve by 62 per cent an additional tax levy six mills, (2) the board approve a record salary schedule of \$4,200 to \$7,500, and (3) the district develop and utilize energetic and efficient citizen advisory committees.

CONNECTICUT

Supt. Albert Murphy, of Putnam, has been re-elected for a three-year term.

A. C. Latimer has been re-elected president of the Atlanta board. Harold F. Jackson was named vice-president.

Dr. W. D. Ross has been elected a member of the Nampa board.

Edward E. Glenn is the new superintendent of the Perry township schools in Indianapolis. Supt. B. H. Stephan will retire from the

superintendency at Huntington at the end of the school year in June. Albert A. Woll has been appointed to the board of trustees of Evansville to succeed

Louis Ruedlinger.

William E. Wilson has been appointed State Superintendent of Public Instruction. He succeeds Wilbur Young, who held the office eight

Supt. John H. Hurris, of Des Moines, has been re-elected for a three-year term.

KANSAS

Supt. H. W. Scott, of Newton, has been reelected for a two-year term. W. L. Duby was named assistant

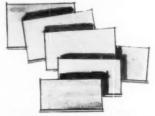
D. W. Frazer has been re-elected superintendent at Atchison.

LOUISIANA

Charles G. Wall, Jr., has been re-elected president of the Ouachita parish board at Monroe.



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John Greaud has been elected president of the West Baton Rouge parish board at Baton

Robin N. Hood has been re-elected president of the Caddo parish board at Shreveport.

L. H. Butler has been elected president of

the Bossier parish board at Benton.

MASSACHUSETTS

J. Harold Moody has accepted the superintendency at Dartmouth.

William R. Wright succeeds J. Harold Moody at Athol

MISSOURI

Frank S. Land is the new president of the Kansas City board.

Rex R. Wyrick has been re-elected superintendent at Warrensburg.

Supt. George Haney, of Butte, has been reelected for a three-year term.

NEW JERSEY

Alexander A. McKenzie is the new president of the Hackensack board, Mrs. Richard A. Harris is vice-president.

Emil Gausconi is president of the West New

George Heffran is the new president of the Paterson board James Kimple is the new superintendent at

Dr. William Crawford is the new president of the Clovis board.

Supt. Harold Lovender has been re-elected at Albuquerque.

Supt. Vernon Mills has been re-elected for a three-year term at Artesia.

George P. White, of Santa Fe, has been appointed State Supervisor of Elementary Edu-

NEW YORK

President Charles H. Silver has been reappointed for a second seven-year term as a member of the New York City board of edu-cation. Mr. Silver was first appointed as a Manhattan member of the board in May, 1952, and has served as president for the past four years

PENNSYLVANIA



Medill Bair, regional superintendent of Pennsbury schools, Fallsington, Pa., has nounced his resignation, effective at the close of the present school year, to accept a position as superintendent of schools in Lexington, Mass., and will also serve as an as-sociate on the Harvard

Graduate School of Education faculty. During the ten years of his administration in Pennsbury, new buildings have been constructed, with an approximate cost of \$16,000,000. Minimum teachers salaries have been increased from \$2,000 to \$4,000, and student enrollments have increased from 1473 to 8620

Dr. John Burkhart is the new president of the Knoxville board.

John W. Letson is the new superintendent at Chattanooga.

Supt. H. W. Goodgion has been re-elected at

Dr. Henry A. Petersen is the new president of the Houston board

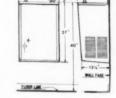
SCHOOL BOARD JOURNAL for MAY, 1959



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21 RECOMMENDATIONS OF THE CONANT REPORT

1. The Counseling System - There should be one full-time counselor or guid-ance officer for every 250-300 pupils in

the high school.

2. Individual Programs - It should be the policy of the school that every student have an individualized program; there would be no classification such as collegepreparatory, vocational, or commercial.

3. Required Programs for All - 4 years

of English, 3-4 of social studies, 1 of math, and 1 of science, plus a "significant sequence" of electives.

4. Ability Grouping - Students should be grouped according to ability subject by

5. A Supplement to a High School Diploma - Each student should be given a durable record of the courses studied in four years and grades obtained.

6. English Composition - The time devoted to English composition during the four years should be half the total time given to the study of English; a schoolwide composition test should be given in every grade.

7. Diversified Programs for the Development of Marketable Skills - Half a day is required for 11th and 12th grades for

vocational work.

8. Special Considerations for the Slow Reader - Ninth-graders who read at a level of 6th grade or below should have special attention by special teachers.

9. Programs for the Academically Talented - School policy should be adopted in regard to elective programs for academically talented as a guide to counselors.

10. Highly Gifted Pupils - Identification of this group, about 3 per cent nationally of the student population, should start in 7th or 8th grade.

11. The Academic Inventory - Annual academic inventories, summarizing the programs of academically talented, without giving names, should be supplied school boards.

12. Organization of the School Day-There should be at least six periods in addition to the required physical education and driver education.

13. Prerequisites for Advanced Academic Courses - Standards in advanced courses should be such that those who enroll in each successive course of a sequence have demonstrated the ability to handle

14. Students Should Not Be Given a Rank in Class According to Their Grades in Subjects - Desire to rank high has led bright students to elect easy courses in

order to get high grades.

15. Academic Honors List - At the end of each marking period a list should be published of students who had elected courses recommended for the academically talented and had made an average grade

16. Developmental Reading Program -A school should have equipment for a developmental reading program.

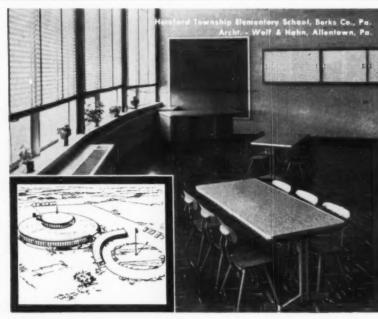
17. Summer School - The school board should operate a tuition-free summer school, both for repeaters and for the ambitious.

18. Foreign Languages - Guidance officers should urge the completion of a fouryear sequence of one foreign language if the student demonstrates ability in handling foreign languages.

19. Science Courses - All students should obtain some understanding of the nature of science and the scientific approach, given in a course divided into three sections grouped by ability.

20. Homerooms - For the purpose of developing an understanding between students of different levels of academic ability and vocational goals, homerooms should be organized in such a way as to make them significant social units in the school.

21. Twelfth-Grade Social Studies — This course should develop not only an understanding of the American form of government and of the economic basis of our free society, but also mutual respect and understanding between different types of students.



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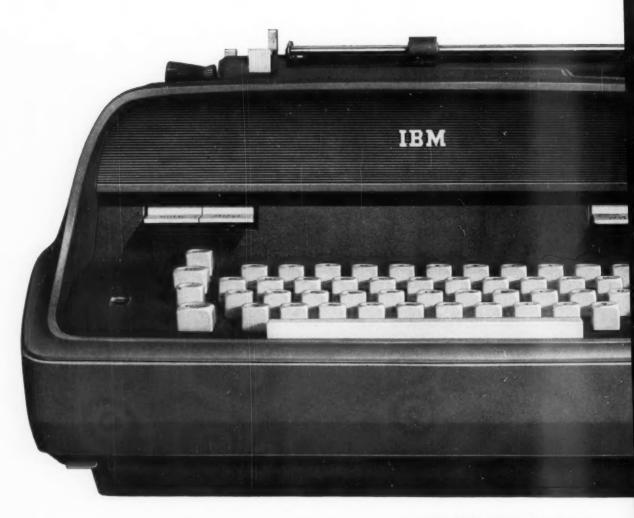
TEMPO TEACHERS DESK



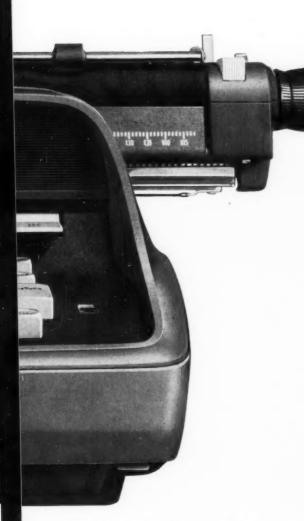
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NEW BOOKS

Schoolhouses

ville, III.

School Boards.

Edited by Walter McQuade. Cloth, 271 pp., O. Simon & Schuster, New York, N. Y. This book is modestly designated "a primer

about the building of the American public school plant" and is a joint research project by the Aluminum Company of America, the architectural firm of Eggers & Higgins, and Walter McQuade, assisted by a group of consultants and advisers including schoolmen, psychologists, and architects.

The book is written with disarming simplicity and informality, but represents a deeply sincere study of the problem of making the

School Board Leadership in America

By Edward M. Tuttle, Cloth, 320 pp., \$5.

This book is concerned with two aspects of

The Interstate Printers and Publishers, Dan-

leadership in American city school boards:

(1) the individual leadership of members as

this is exerted in official business and de-

veloped through ideals and attitudes based on

right standards and principles; (2) the lead-

ership which is active in the state associations

of boards and the National Association of

of the book are the chapters devoted to the

practical problems of school board functions

and relations, the procedures of policy mak-

The important and most valuable sections

school building a satisfactory tool for providing American children with an elementary and secondary education. The book is addressed to school boards and superintendents who have the job of meeting their local problems, who are concerned that the school building shall meet the future as well as the present needs of the local school systems, and who have the rather difficult job in many communities of adjusting site, structure, cost, design, and equipment to a satisfactory result

The reviewer may not altogether agree with some of the ideas expressed by the writers, but there can be no disagreement about the problems which are to be solved. The book is magnificently illustrated with pictures in which there is a constant repetition of the idea that school buildings are intended for children, that their education is given under a great variety of conditions and difficulties, and that every aspect of the problems must be solved in terms of service to the children and help to the teacher who is giving the instruction.

The final section provides a review of modern school buildings pictorially and strongly emphasizes a variety of interiors and exteriors that grow out of local conditions in the South, the Middle West, and the Far West. The illustrations have been used with splendid effect. The book is a real contribution to the growing literature of American school archi-

What's Happening to Our High Schools?

By John F. Latimer. Cloth, 196 pp., \$3.25.

Public Affairs Press, Washington 3, D. C. This book provides in addition to a brief history of secondary education in the United States, an analysis of the changes which have taken place during the past 50 years in the purposes and the curriculum of high schools. The book makes clear the reasons for the present demands for changes and notes several recent experiments in revising the approach to the teaching of mathematics and Greater interest in teaching foreign languages is advocated. The author is concerned that more than twice as many students are enrolled in business and commercial subjects than in modern languages. He feels that the abilities of a large number of high school students have been greatly underestimated by teachers and parents, and that these children are not encouraged or required to exert themselves and get the most out of their high school opportunities. He feels that isolated and specialized courses in physical sciences, the social sciences, and English have interfered with the proper study of these subjects. The book provides an insight into the present high school situation which is not available in studies like that of Conant.

month-to-month management of

For the Boardman's Shelf

school business in board meetings and com-mittee operations. There are also useful chapters on local taxation for the schools, the development of building programs, the importance of improving community and citizens' relations, and the responsibility of seek ing better morale and higher instructional efficiency. It is interesting to note that the author's argument for federal aid to educa-

The author has drawn splendidly on his experience as secretary of the NSBA to recommend effective methods of conducting state associations of school boards. There are numerous toucher which show that the book is a labor of love

tion has never found acceptance in NSBA.

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Guide to the National Defense Education Act of 1958

Compiled by Theodora E. Carlson and Catherine P. Williams. Paper, 32 pp., 30 cents. Superintendent of Documents, Government Printing Office, Washington 25, D. C. This bulletin outlines the purpose, the ad-

ministration, and the general provisions of the act, which authorizes over \$1 billion in federal aid for financing education in the several states. In the sweep of its ten titles, it touches every level of education, public and private, from the elementary through the graduate. It brings to the educational systems resources and encouragement at a time when they are badly needed.

Projections of School-Age Population, 1959-63

Paper, 7 pp., 25 cents. Research Division, National Education Association, Washington

This report for 1958 shows the distribution by state of the population 5 to 17 years of age, for each of the years from 1959 to 1963. Two series of projections use the 1950-57 migration pattern for states as a guide in determining future migration. Data in Table 3 is a projection of survivors of cohorts of persons in each state on July 1, 1957, who would be 5 to 17 years of age on each projection date, 1959 to 1963.

The Big Red Schoolhouse

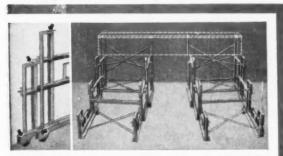
By Fred M. Hechinger. Cloth, 240 pp., \$3.95. Doubleday & Co., Inc., Garden City, N. Y

This book provides an objective study of the Russian system of education and its recent expansion



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(LEFT) Rollers eliminate metal-to-metal friction at contact points. Top arrows show horizontal rollers in channel under foot boards, bottom arrows show vertical rollers between wheel assemblies.

(RIGHT) Standard 16-ft. section, showing vertical and horizontal bracing. Rigid structure keeps rows always parallel to insure straight, in-line tracking as rows telescope in or out.

duce effort. Complete 16-ft. sections move straight in and out, without binding or cocking. The simple telescoping design eliminates jointed levers and crossarms.

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OUR MANPOWER PROBLEM

(Concluded from page 28)

vocational guidance, in the final analysis, must be evaluated in terms of the contribution it makes to (1) the maintenance of a balance between labor supply and demand, (2) the alleviation of occupational maladjustment on the part of the individual, and (3) the optimum utilization of human resources. Clinically orientated counselors whose training has neglected a study of economics, labor problems, and the philosophy of vocational education may have to be retrained to do the guidance job that

needs to be done in America today.

A fourth factor which would be involved in a functional man-power management program is some fundamental changes in our educational system. What we must have in the schools of this country, if they are to aid in the solution of our man-power problem, is a system that differentiates, at the upper grade levels, on the basis of kind instead of amount. That is, we must provide one type of education for the academically talented youth, another for the average, and still another for the dull, with such elements as citizenship training, physical and health education, music, art, and

the like as unifying agencies.

In spite of what the Council on Basic Education may contend to the contrary, anyone who has ever taught youth of low ability knows that it does not make sense to try to teach them advanced mathematics, science, and foreign languages. Not only will they not learn these things, but to try to teach them such material is a waste of effort and leads to the neglect of the bright ones who can learn these subjects with satisfaction to themselves and profit to society. For many youth of low ability, who are neither interested in nor able to learn academic subjects, the school, at best, may be largely a custodial institution. It has been that for years.

In any event, not more than 20 per cent of our youth will ultimately find jobs in the professions and managerial occupations; the majority will be housewives, tradesmen, farmers, sales people, service workers, and the like.

Finally, if the schools are to contribute substantially to the solution of our man-power problem, they must give much more attention to the placement of people in the occupations for which they have trained them. Observe, for example, that about 45 per cent of the youth trained in our day trade schools do not work in occupations even remotely related to the ones for which they are trained, and that about one half to three fifths of the youth who take vocational agriculture do not farm or work in occupations related to farming. Many enrolled in these programs will tell you frankly that they have no intention of following the occupation for which they are being trained. Most of the schools where this condition exists indicate in research studies that they have a "good guidance program."

Counselors and school administrators should know that in the final analysis, vocational education must be evaluated in terms of three things: (1) the percentage of those trained who find employment in the occupation for which they were trained or a related one; (2) how well they perform in this occupation in comparison with those who lack such training; (3) how well they are satisfied with the occupation of their choice and for which they have been trained.

We are in a struggle for survival with Russia. The Russians openly boast that they intend to beat us, not at war, but by out educating and out producing us. One thing seems crystal clear in this struggle: To manage our manpower as we do our natural resources and to direct the education of our children in accordance with their ability and the needs of our society will not make Russians out of us. What our schools need, what this country must have is a new sense of realism.





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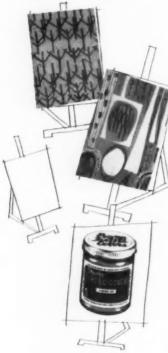


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THE SCHOOL SCENE

(Concluded from page 8)

people. Dr. Allen gave his views at a fourday conference at Teachers College, Columbia University, on problems of large school districts.

Dr. Allen said he proposed the establishment of federated school districts, with powers to levy nonproperty taxes, to apportion funds, administer transportation facilities, borrow money, and plan school buildings. He suggested that each unit in the federated system operate as a local school system, administer the educational program, and determine teachers' salaries.

CHICAGO SCHOOLS RECEIVE GRANT

The Chicago board of education has received a grant of \$50,000 from the Educational Facilities Laboratories, Inc. The grant will enable Chicago administrators to make a comparative analysis of the more than one hundred school building projects which the board has undertaken since World War II. An attempt will be made to develop improved methods of long-range predictions of the fluctuation of school enrollments in various school areas of the city.

EDUCATION EXPENDITURES IN 1958

The U. S. Department of Commerce, in its latest Summary of State Government Finances for 1958, reports that the total expenditures by the states for education amounted to \$23.556 millions, or an average of \$43.22 per capita.

DR. FISCHER APPOINTED



Dr. John H. Fischer, superintendent of schools at Baltimore, Md., has been appointed dean of Teachers College, Columbia University, effective September 1. He will succeed Dr. Stephen M. Corey, who recently resigned. Dr. Fischer has been Baltimore's superintendent since 1953 and has been as-

sociated with its school system for nearly 30 years. He is very active in educational, social, and fraternal circles in the East and Southeast

VIRGINIA URGED TO ADOPT LOCAL OPTION PLAN

Virginia school boards were armed with a locally administered pupil assignment plan to minimize integration as part of the Perrow Commission's proposal to provide "freedom of choice" for each locality and individual parents to decide about desegration. A complete change from Virginia's "massive resistance," the plan recognizes that the desegration problem varies widely throughout the state, giving communities the choice of continuing public schools as in the past or of destroying them by withdrawing financial support. In addition, scholarships, or tuition grants, would be made available to all children who prefer to attend private non-sectarian schools.







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Two new construction panels made of steel and/or aluminum have been engineered by the Butler Mfg. Co., Kansas City 26, Kans. Monopanl is a complete exterior wall section finished inside and out in combinations of



Monopanel Exteriors

steel and aluminum, fully insulated, and ready for use as installed. It is factory-cut to fit a pre-engineered structural system and can be used with Butler prefab buildings or ordered as a building supply product. An automatic self-sealing design is featured on the panels. According to the manufacturer, it is the first building cover of its kind to use vinyl gaskets. Finished effect of the Monopanl is one of continuous panelling with a soft Scotch-grained appearance. The second product is a corrugated steel or aluminum panel called Butlerib. These panels are 3 ft. wide and available in lengths up to 32 ft. for speed in construction. The corrugated pattern combines a modern look with greater strength, rigidity, and weather tightness. Write to the manufacturer for full details.

(For Further Details Circle Index Code 066)

SIT-DOWN DUPLICATOR

A seated posture duplicating machine, model 14D74, is the latest addition to the line of Ditto Inc., Chicago 45, Ill. The design promises operator comfort with efficient duplicating.



Adjustable Foot Pedals

The foot pedal is adjustable for short or tall operators, controls speed, frees the operator's hands for handling copies. With a flip of the fluid clips, the operator can switch from large sheets to small ones, an answer to running

labels and small documents in succession with larger forms. The machine handles forms from 3 by 5 in. to 14 by 14 in., at speeds up to 120 copies per minute. Machine features a magnetic drum for making blockouts on copy, a "no pour" fluid supply with visible fluid gauge, and a lever adjustable for continuous hand feeding.

(For Further Details Circle Index Code 067)

DESIGNER FURNITURE FOR LIBRARIES

A designer-created line of library furniture combining wood and metal construction has been announced by Remington Rand Div.,



Metal and Wood Construction

Sperry Rand Corp., New York City 10. The Designer line is a product of designer Norman Cherner. Featuring both structural strength and beauty, the pieces are made of aluminum reinforced with steel, and wood exteriors. Designer pieces include: catalog cases, charging desks, tables and chairs, and book display racks. One of the more interesting pieces is a child's double slope reading table. Write to the manufacturer for more information.

(For Further Details Circle Index Code 068)

NON-SLIP FLOOR MATS

Nyracord is a composition floor matting of quality rubber with a reinforcing nylon synthetic fiber. According to the manufacturers, American Mat Co., Toledo, Ohio, the finished product resists abuses and heavy foot traffic such as spikes, cleats, and skates. The resilient matting absorbs noise, is slip-resistant when wet or dry, and is easily cleaned. It will withstand extreme heat or cold without deterioration. Nyracord will be used in floor matting, runners, stair treads, mats, and bumpers offered by this firm. Literature will be sent upon request.

(For Further Details Circle Index Code 069)

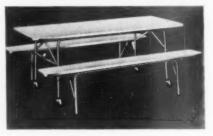
ART CRAYONS CHANGE SHAPE

A square shape for drawing crayons is announced by the American Crayon Co., Sandusky, Ohio. The new shape is easier to hold and use. It encourages a wider variety of dramatic effects in sketching, illustrating, designing, blendding, and all color experimenting. Prang Color Classics, No. 978, will not roll off desks. The square form also adds firmness and durability to the hydropressed crayon. The new art crayons are available in packages of 16 standard colors.

(For Further Details Circle Index Code 070)

ROLLAWAY TABLE-BENCH

A 6-ft. folding bench and table unit for small cafeterias and gymnasiums is available from Howe Folding Furniture, Inc., New York 16, N. Y. Designed for use in small areas,



3-Way Table Unit

the Howmatic 6 is fast folding and easy to operate. It features a table top of aluminum edged Formica on plywood, solid hardwood benches with auto lacquer finish, and cadmium plated legs of one inch tubing. When open, the table seats 8 to 10 people. It can also be converted for use as a bench with backrest or a two-tier bleacher. The multi-purpose unit is easily folded and rolled away to storage areas.

(For Further Details Circle Index Code 071)

PORTABLE PUBLIC-ADDRESS UNIT

This lightweight portable public-address system weighs only 6½ lb. It is designed for a small audience of 300 or for areas up to 3000 ft. A product of Raven Electronics Mfg.



For Small Audiences

Co., Chicago 12, Ill., the complete unit has an 8-in. high fidelity speaker, comes complete with microphone and outlet cord. Carrying case measures 12 by 10 by 6 ins. Available in an ebony finish wood cabinet with chrome carrying handle, or a gray finish metal cabinet. An accessory table and floor microphone are optional. The unit is very reasonably priced.

(For Further Details Circle Index Code 072)

SCHOOL AIR CONDITIONER

Herman Nelson Packaged Liquid Chiller is a complete, factory-assembled air conditioning unit designed especially for use in schools. The new product is available from the American Air Filter Co., Inc., Louisville, Ky. The chiller functions as part of a unit ventilator air-conditioning system. Chiller is simple to operate, easy to maintain, and will give efficient temperature control to individual class-

(Continued on next page)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION rooms despite varying occupancy conditions. An optional feature is a safety-interlocked control panel, a system of gauges and lights that pinpoints any trouble and automatically shuts off the system. Ten models are offered in ranges of 20 to 120 horsepower, and capacities from 15 to 166 tons. Send for Bulletin No. 675-A1.

(For Further Details Circle Index Code 073)

FLEXIBLE AUDIO-DESK

Flexi-Desk is a combination classroom desk and language laboratory booth designed by Language Training Aids, Language Center, Boyds, Md. It converts from desk to lab booth in seconds by raising the side panels. Work surface space measures a full 24 by 30 inches for both. Side panels with rustproof piano hinges are lined with acoustic material.



Converts to Classroom Desk

Panels can be cut out to accommodate all types of electronic equipment. The Flexi-Desk is constructed with a birch hardwood finish and square tubular steel legs. Literature is available from the manufacturer

(For Further Details Circle Index Code 074)

COLORED PLASTIC FURNITURE

Solid plastic classroom furniture in colors is available from Schoolco, Inc., Division of Configured Tube Products Co., Bellwood, Ill. The "700" series includes a combination chair



Pediform Unit

desk with study top; a tablet arm chair; and the Schoolco Pediform, a pedestal desk. Seatdesk units are designed with saddle seats and backs for posturized, form fitting comfort. Desk tops have a generous 19 by 26-in. writing surface. A choice of five colors is offered for seats and backs, two for desk tops. Send for details on this and three other lines of classroom furniture made by the company.

(For Further Details Circle Index Code 075)

STAINLESS STEEL FOOD CARRIERS

Vacuum Can Co., Chicago 12, Ill., has added a new stainless steel, vacuum insulated, portable food carrier to its AerVoiD line. The carrier has a four-pan insert assembly, made entirely of stainless steel. Capacity of the carrier is 11 gals., or 8¾ gals. with the pan assembly. No rack is needed with the carrier, since pans nest together and are held in place by the cover. All items are of stainless steel, with lids and bodies seam welded, and with guaranteed leakproof vacuum insulation. These food carriers will keep food hot and can be adapted to any kind of food service—cafeteria, classroom, or family style. The units comply with the sanitary construction requirements of the U. S. Public Health Service. Send for descriptive leaflet.

(For Further Details Circle Index Code 076)

CAFETERIA CASH REGISTER

A new model cash register, No. 8310-K5, has been designed particularly for use in the school cafeteria by R. C. Allen Business Machines, Inc., Grand Rapids, Mich., makers of office equipment and supplies. The cash reg-



Has Checking Tape

ister with indication tape is electrically operated. School lunch records can be more easily reported by means of the machine's five activity counters; which can give individual totals of milk, lunches, meal tickets, etc. Each counter has a capacity of 999. The cash register features visible dials with shutter and lock, locked-in detail tape, and motorized repeat key for identical ring-ups. The low-cost machine is available in a standard desert gold or a choice of four metallic pastel hues.

(For Further Details Circle Index Code 077)

SERV-O-LIFT DISH DISPENSER

The Serv-O-Lift Corp., Dorchester, Mass., is offering a self-leveling dispenser for cafeteria use. The four-stack unit will hold up to 144 bowls or 288 plates, cups or glasses. Dishes are held in perfect alignment by non-rotating guides. The dispenser has a heavy steel frame with gray baked enamel finish and stainless steel top. A ½ in. flange around the dis-densers prevents crumbs and dirt from being wiped into the unit. Dispenser is available as chassis unit for in-counter installations or as a mobile unit. Wrap-around or vertical corner bumpers are optional. Also optional is a heating unit of 1000 watt capacity, thermostatically regulated and wired for 110 or 220 volt, 60 cycle power supply. A neat switch box on the front of the unit contains on-off switch, pilot light, thermostat, plug and cord. The company also manufactures a self-leveling tray dispenser, which holds 90 to 150 trays.

(For Further Details Circle Index Code 078)



PORTABLE FOLDING STAGE

Schieber Mfg. Co., Detroit 39, Mich., makers of folding tables and benches, has a new portable folding stage. The understructure of the stage features a floor support at every joint for complete stability. The stage features 500 lb. pull test expansion type anchors for securing the understructure to the floor. It



Six Sizes Offered

has more supporting legs than found on most portable stages and every other leg has a crutch tip for more solidity. A minimum of space is needed for storing the stage. It can be easily rolled to any position on its rubber casters. Model "SA" comes in widths of 6, 8, 10, 12, 14, or 16 ft. Matching folding steps are also offered by the firm. Write for sizes and specifications.

(For Further Details Circle Index Code 079)

(Continued on next page)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

FOR MARKING GYM FLOORS

The Dearborn Paint Striper is especially designed for marking gymnasium floors. Circular lines on basketball courts are easily painted with this handy unit. The machine features interchangeable striper wheels in 1-, 2½-, 3-, and 4-inch sizes, and a detachable paint tank



Paint Tank Is Detachable

for changing colors and easy cleaning. The 40-lb. striper is easy to maneuver. Paint flow is controlled by a separate grip handle. The striper can also be used to mark parking lots, tennis courts, garage and warehouse areas. The unit is manufactured by Dearborn Paint Striper Mfg. Co., Detroit 7, Mich.

(For Further Details Circle Index Code 080)

PRACTICE NETS FOR GYM.

Baseball and golf can now be practiced in the school gymnasium. The Berlin Chapman Co., division of Consolidated Foundries & Mfg. Corp., Berlin, Wis., is offering a nylon and nycot practice net measuring 120 ft. square by 50 ft. high. A netted roof covers the mesh walls, completely enclosing the play area. The practice net can be used full measure for indoor baseball practice. With two dividing center nets it converts into three practice golf areas, 40 by 120 ft. The net has a 3-in. support frame with pulleys that can be raised to the ceiling when not in use. The entire net walls can be raised or lowered by an automatic remote control within one minute.

(For Further Details Circle Index Code 081)

COLORFUL CLASSROOM GLOBES

A new line of Educator globes has been introduced by Weber Costello Co., Chicago Heights, III. Four globes are available in 12- or 16-in. sizes, with three types of mountings, including the new Tri-purpose mounting pictured. The Tri-Graphic contour relief globe presents



Available in Four Models

mountain ranges, elevations, and political information in realistic, colorful, three-dimensional printing. A Duo-graphic globe shows countries and pertinent physical features. A Vitographic project globe shows land areas in green on blue ocean area; it can be marked with chalk and easily erased. There is also a simplified beginner's globe. Send for a colorful brochure detailing the new line.

(For Further Details Circle Index Code 082)

RISER UNITS FOR CHOIRS

The Wenger Music Equipment Co., Owatonna, Minn., has designed a new three-step standing chorus riser. The St. Olaf style, as it is called, consists of five units of three-step risers, of varying lengths to permit the same number of singers in each row. By using sharper angles on each unit, shaped end units and deeper steps, the designers have brought all the singers an equal distance from the director and allowed for more room for singers on the steps. The five-unit sets accommodate from 60 to 70 singers. Steps have a tough, genuine rubber tread protected at each end by steel molding. Each unit folds for easy storage and transportation.

(For Further Details Circle Index Code 083)

AUDIO-FILMSTRIP PROJECTOR

The Micromatic, available from the DuKane Corp., St. Charles, Ill., is an automatically synchronized filmstrip projector and record player. Sound features on the machine are a plug-in cartridge with spare needle and im-



Phonograph-Projector

proved sound fidelity. Projection features of the Micromatic, No. 14A-290B, are the elimination of film rewinding, stubby lamp for jet stream cooling, and ½0 second picture change. The Micromatic is enclosed in a redesigned briefcase-styled carrier of maroon pingrain and brushed aluminum. A second model, No. 14A-335B, is manually operated and includes all of the new features, except automatic film advance.

(For Further Details Circle Index Code 084)

ALL-IN-ONE SLIDE PROJECTOR

A self-contained carrying case holds the new automatic slide projector from Bell & Howell, Chicago 45, Ill. Swing down front and rear panels, when closed, provide all the covering needed by the machine. The projector has illuminated "dashboard" controls at the back of machine and an automatic remote control system that permits slides to be moved in reverse as well as forward at the touch of a button. Four models are included in the new Explorer series. New features include: a slide holder that mechanically holds the slide in focus for long periods of time; an adjustable lens that permits focusing image

size to screen without moving the projector; a carrying handle that can be used as a front tilt support; and a built-in device to permit rearrangement of slides during use. Unit comes in grained black vinyl or two-tone fawn and brown cases.

(For Further Details Circle Index Code 085)

A LITTLE YELLOW SCHOOLBUS

International Harvester Co., motor truck div., has introduced a new light-duty school bus for small groups of passengers. The bus can accommodate 12 children or 10 adults, who sit facing each other on two long seats. The bus includes: assist entrance handle, lowered entrance step, door control lever for the driver, and automatic safety signal lights.



Seats 12 Children

Other equipment on the coach: emergency door signal lights, defroster fan, fire extinguisher, fire ax, and first aid kit. The bus has optional features such as two- or four-wheel drive chassis, automatic transmission, power steering, and power brakes. Standard sized buses to accommodate from 20 to 72 students are also available from the firm.

(For Further Details Circle Index Code 086)

CATALOGS AND BOOKLETS

A most comprehensive explanation of a centralized school food service is offered in a new 40-page booklet, "The Satellite System of Food Service." School administrators and architects should write for a free copy from Lincoln Mfg. Co., Inc., Fort Wayne, Ind.

(For Further Details Circle Index Code 087)

"The Focts About School Furniture Today" is a new 16-pp. booklet from American Seating Co., Grand Rapids, Mich. The book gives an objective appraisal of the advantages and limitations of basic types of classroom seating. Send for a copy.

(For Further Details Circle Index Code 088)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

MANUFACTURER'S NEWS

Some 600 science scholars from Minnesota high schools attended a multi-million dollar exhibit of Minneapolis-Honeywell's research and engineering activities in observance of National Engineers Week in February. The 75 exhibits ranged from solar heating to space age projects. The Minneapolis firm is the world's largest manufacturer of automatic controls.

Rockwell Mfg. Co., Delta Power Tool Div., announces the promotion of William E. Mac-Lachlan to manager of school sales. He is a member of several industrial arts organizations, including the American Industrial Arts Association and American Vocational Association.

J. J. Stefan is the newly appointed president of the school equipment division of Brunswick-Bulke-Collender Co., Chicago.

READER'S SERVICE SECTION INDEX TO SCHOOL EQUIPMENT

The index and digest of advertisements below will help you obtain free information, catalogs, and product literature from the advertisements and companies listed in the new products section. Merely encircle the code number assigned to each firm in the request form below, clip the form and mail it to THE AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention.

For your free copy of "Cincinnati's Adventure Into ETV," which appeared in the February through April, 1959, JOURNAL, please check the box on the post card at the right, fill in your name and address and mail. No postage needed.

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These cards are provided for the convenience of THE AMERICAN SCHOOL BOARD JOURNAL readers in requesting information on products, services, booklets, and catalogs offered by the advertisers in this issue.

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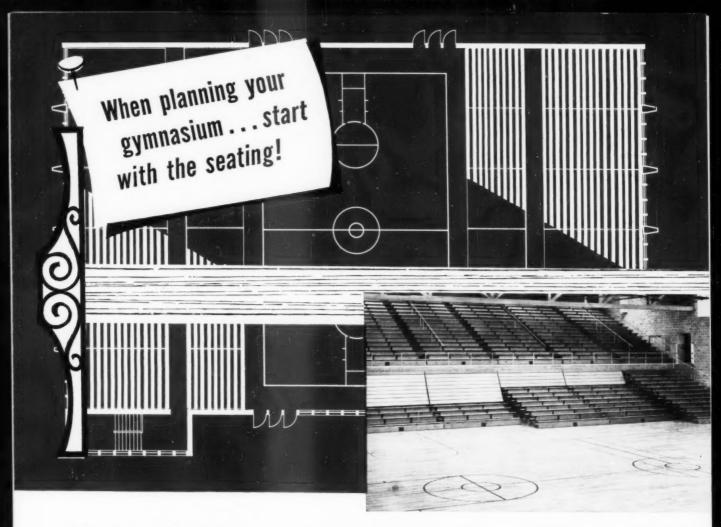


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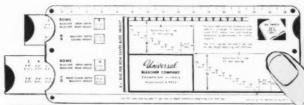
HERE'S HOW: Thousands of installations prove that the 8½" rise per row on Universal Roll-A-Way Bleachers provides the "just right" sight line without sacrificing leg room or seating comfort. It also results in savings up to 2" rise per row in wall height. In a gymnasium 160' wide and 100' long, with 13-row Universal Roll-A-Way Bleachers on both main floor and balcony, this 2" saving per row means a 4' saving in building height and 2,080 sq. ft. saving of wall construction... worth thousands of dollars. It also means 64,000 cu. ft. of space which does not have to be heated. There are many other savings, too. Investigate!



PLANNING BOOK AND CATALOG

This unique new book shows and tells how to plan the very best in safe, comfortable seating... yet reduce total costs. It actually demonstrates how ideal sight line can be attained

on both main floor and balcony; also describes and illustrates all mechanical features of *Universal* Roll-A-Ways, *Poweroller* for one-man bleacher operation, plus other accessories. A valuable book . . . yours for the asking.



FREE BLEACHER-GRAPH CALCULATOR

Remarkable new slide-rule type calculator will be of valuable aid to you in planning a gymnasium with Roll-A-Way Bleacher seating. It figures seating capacity per gym size, and vice versa. It shows proper balcony height for ideal seating sight line in relation to main floor seating. At the same time, it shows how proper planning can reduce ceiling height to a practical minimum... for big savings in both building and heating costs. Send for yours; no cost or obligation.

UNIVERSAL BLEACHER COMPANY

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